

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF MICHIGAN**

GERALD E. ANDREWS;
MARY MARGARET BAKER;
JOHN FRANKLIN BISHOP;
JAMES MIKE BUSSEY;
BRIAN BYLSMA;
GLENN CARARINI;
KEVIN CARPENTER;
JEFFREY CHANDLER;
LEAANN MARY CLARK;
ZOANNE CLARK;
ASHLEE CODY;
JOHN DICKEY;
DENNIS EDWARDS;
SHARON LEE FLOYD;
MINDY GIANETTINO;
PATRICIA A. GODOY;
MICHAEL HALL;
SABRINA HAMMEL;
MARVIS HANBAUM;
RODNEY HANBAUM;
VIVIAN HENRY;
DESIDERIO JAUREGUI;
BRENDA L. KAPPEN;
STEVEN DALE KIRIAN;
MELVA E. KOEPKE;
TERRY KRAWCZAK;
DONNA JO LANSKY;
STUART MAHAFFEY;
DEROLD MARTIN;
MELISSA McFADDEN;
DELORIS GAIL MICHALAK;
MARK PARKS;
ROBERT ALAN POTTS;
RICKY SEXTON;
LAMAR B. TAYLOR;
WAYNE ROGER THOMAS;

Civil Action No: _____

**COMPLAINT AND JURY
DEMAND**

CYPRIAN EDWARD YOST;

Plaintiffs,

vs.

3M COMPANY;
AGC CHEMICALS AMERICAS,
INC.;
AMEREX CORPORATION;
ARCHROMA U.S., INC.,
ARKEMA, INC.;
BUCKEYE FIRE EQUIPMENT;
CARRIER GLOBAL
CORPORATION;
CHEMDESIGN PRODUCTS, INC.;
CHEMGUARD, INC.;
CHEMOURS COMPANY LLC.;
CLARIANT, INC.;
CORTEVA, INC.;
DEEPWATER CHEMICALS, INC.;
DUPONT DE NEMOURS, INC.;
DYNAX CORPORATION;
E. I. DU PONT DE NEMOURS &
CO.;
JOHNSON CONTROLS, INC.;
HONEYWELL SAFETY
PRODUCTS;
MSA SAFETY, INC.;
NATIONAL FOAM, INC.;
PBI PERFORMANCE PRODUCTS,
INC.;
PERIMETER SOLUTIONS, LP;
RAYTHEON TECHNOLOGIES
CORPORATION;
STEDFAST USA, INC.;
SOUTHERN MILLS INC. D/B/A
TENCATE PROTECTIVE FABRICS;
TYCO FIRE PRODUCTS, L.P.;
W.L. GORE & ASSOCIATES, INC.

Defendants.

COMES NOW, the Plaintiffs, by and through undersigned counsel, and allege upon information and belief as follows:

INTRODUCTION

1. These Plaintiffs’ case arises out of Defendants’ decade-long calculated, fraudulent, and knowing concealment of their polluting activities that contaminated Plaintiffs’ source of drinking water and caused Plaintiffs’ serious health outcomes. Over the years, the Defendants knowingly and recklessly manufactured, designed, marketed, distributed, released, promoted, or sold bio-persistent, cancer-causing per- and polyfluoroalkyl (“PFAS”) substances that were discharged into nearby streams/underground soil, including Plaintiffs’ source of drinking water while persistently and fraudulently denying the deleterious nature of their activities.

2. Plaintiffs bring this action to recover monetary damages and appropriate equitable relief for harm sustained from exposure to, and consumption of, drinking water that Defendants knowingly contaminated with PFAS-containing Aqueous Film Forming Foam (“AFFF”) products (PFAS) at various locations, such that the Defendants should have known that the said products would be delivered to the Wurtsmith Air Force Base and the surrounding Iosco and Oscoda Counties in Michigan, as many other military installations, for training and firefighting activities.

3. Plaintiffs are among other affected downstream residents who lived and/or worked at the Wurtsmith Air Force Base, and the surrounding areas within Iosco and Oscoda counties and other military installations. Plaintiffs regularly consumed drinking water contaminated with the Defendants' PFAS chemicals.

4. Defendants distributed and sold AFFF chemicals or products containing PFAS to the United States Air Force and military, including the Wurtsmith Air Force Base, for fire training and firefighting activities.

5. For purposes of this Complaint, the term PFAS will refer to the chemicals including PFOS, PFOA, PFNA, PFBS, PFHxS and HPFO (Gen-X), all of which fall within a class of chemicals known as "PFAS" or "foam-forming chemicals." PFAS are found within the fluorochemical products defined above as well as their precursors and derivatives, all their salts and ionic states, as well as the acid forms of the molecules and their chemical precursors.

6. PFAS are persistent, toxic, and bio-accumulative compounds when released into the environment. PFAS has impacted stormwater, surface water and groundwater, and, effectively, contaminated the water relied on by Plaintiffs as their primary source of drinking water throughout their lifetimes.

7. The International Agency for Research on Cancer ("IARC") announced on December 1, 2023, that its Working Group re-assessed the carcinogenicity of perfluorooctanoic acid ("PFOA") and found that PFOA is a Group 1 chemical that

is carcinogenic to humans based on a combination of evidence. IARC also performed its first assessment of PFOS and classified it as a “Group 2” chemical based on strong evidence of possible carcinogenicity. IARC noted that since its previous evaluation of PFOA in 2014, the number of animal bioassays has approximately doubled and there has been a vast increase in the number of studies supporting its new classifications of these chemicals.¹

8. On March 14, 2023, the EPA put forth their proposal to establish legally enforceable levels for PFAS known to occur in drinking water.² The proposed regulation includes Maximum contaminant Levels (MCLs) which, if finalized, are legally enforceable regulatory drinking water standards. EPA establishes MCLs as close as feasible to the health based, non-enforceable, Maximum Contaminant Level Goal (MCLG), taking into consideration the ability to measure and treat to remove a contaminant, as well as the costs and benefits.³ The EPA proposes to set the MCLG at zero for PFOS and PFOA.⁴

9. In addition to announcing the proposed MCLs, the EPA enclosed an updated EPA FAQ Sheet, which makes clear that it is EPA’s current position that

¹ *IARC monographs evaluate the carcinogenicity of perfluorooctanoic acid ...* International Agency of Research on Cancer. (2023, December 1). https://www.iarc.who.int/wp-content/uploads/2023/11/QA_Mono135.pdf.

² See Notice of Proposed Rulemaking, EPA-HQ-OW-2022-0114, <https://www.regulations.gov/docket/EPA-HQ-OW-2022-0114/document>

³ See 42 U.S.C. § 300g–1(b)(4)(B).

⁴ *Id.*

there is no safe level for PFOA and/or PFOS in drinking water. The EPA ***determined PFOA and PFOS are likely carcinogens*** (i.e., cancer causing) and that ***there is no level of these contaminants that is without a risk of adverse health effects***.⁵

10. Within the AFFF multi-district litigation, during the June 2019 Case Management Conference, the Court invited the parties to submit significant developments as they occur.⁶ Summarily, the Department of Justice submitted notice of the EPA rule proposals to the Court on March 14, 2023.⁷

11. To date, there is no safe, acceptable or “normal” level of PFAS in the human body. Further, the fact that PFOA, PFOS, PFHxS, PFHpA, and PFNA are often found together presents a substantial risk to human health. Defendants’ assertions that their products are safe because they do not contain PFOA or PFOS, or because they contain short-chain PFAS is just another example of their efforts to

⁵ Proposed PFAS National Primary Drinking Water Regulation FAQs for Drinking Water Primacy Agencies, U.S. Env’t Prot. Agency, (Mar. 2023), https://www.epa.gov/system/files/documents/2023-03/FAQs_PFAS_States_NPDWR_Final_3.14.23_0.pdf.

⁶ *In re Aqueous Film-Forming Foams Prods. Liab. Litig.*, No. 2:18-mn-02873, ECF No. 129 (D.S.C. June 21, 2019)

⁷ Letter from Christina M. Falk, Esq, U.S. Dep’t of Justice, Asst. Dir., Civil Division, Environmental Torts, regarding EPA Issues Notice of Propose Rulemaking for maximum Contaminant Levels Under the Safe Drinking Water Act, *In re Aqueous Film-Forming Foams Prods. Liab. Litig.*, No. 2:18-mn-02873, ECF No. 2903 (March 14, 2023).

deflect from the reality that there are thousands of PFAS—including precursor PFAS which degrade into PFOA and PFOS.⁸

12. Defendants designed, advertised, manufactured, marketed, distributed, stored, sold, and/or used PFAS chemicals with the knowledge that these toxic compounds would be released into the environment during fire protection, fire training, and first response activities, even when used as directed and for the purposes intended by Defendants.

13. Defendants knew or reasonably should have known that these compounds would reach groundwater, pollute drinking water supplies, render drinking water unusable and unsafe, and threaten public health and welfare, yet decided to cover it up, deny and persistently avoided their obligations and responsibilities.

14. At all times pertinent to this action, foam-forming chemicals provided by Defendants and discharged at Wurtsmith percolated into groundwater in and surrounding the base, contaminating the environment, including: lakes, rivers, ponds, creeks, and their banks; beaches; other land; ground and surface water; sewer systems; and drinking water supplies; including animals (further including fish and

⁸ Technical Fact Sheet - Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA), U.S. Env't Prot. Agency, (Nov. 2017), https://19january2021snapshot.epa.gov/sites/static/files/2017-12/documents/ffrrofactsheet_contaminants_pfos_pfoa_11-20-17_508_0.pdf.

deer consumed by recreational hunters and fishermen) living in or on them, and exposing Plaintiffs to dangerously high levels of fluorochemicals, including PFAS, PFOS, and PFOA.

15. At all times pertinent to this action, Plaintiffs did not know, nor should Plaintiffs have known, of the ongoing contamination of their drinking water through the use, release, storage, and/or disposal of Defendants' PFAS substances as Defendants failed to disclose the toxic nature and harmful effects of these PFAS chemicals. Plaintiffs' consumption, inhalation and/or dermal exposure to PFAS from Defendants' AFFF products caused Plaintiffs to develop the medical conditions alleged respectively herein.

16. Plaintiffs file this lawsuit to recover compensatory and punitive damages arising out of the permanent and significant damages sustained as a direct result of exposure to Defendants' PFAS chemicals at various locations during the course of Plaintiffs' careers as service members and/or firefighting training and firefighting activities. Plaintiffs further seek equitable relief and medical monitoring arising from the same.

PARTIES TO THE ACTION

A. Plaintiffs

17. Plaintiff, GERALD E. ANDREWS, is a resident and citizen of Base City, Michigan. Plaintiff is a former Air Force Avionics Mechanic stationed at Wurtsmith Air Force Base, Robins Air Force Base, Osan Air Force Base, Dyess Air

Force Base, Lackland Air Force Base, and Lowry Air Force Base throughout his Air Force military career. During Plaintiff's military service as an Avionics Mechanic, Plaintiff's primary duties included the completion of flightline maintenance, aircraft maintenance, aircraft repair, and servicing of aircraft weaponry.

18. Plaintiff, GERALD E. ANDREWS, was stationed at Lackland Air Force Base for approximately six weeks while he underwent basic training in December 1977. Thereafter, Plaintiff was transferred to Lowry Air Force Base where he underwent technical school from approximately January 1978 through August 1978. From there, Plaintiff was stationed at Wurtsmith Air force Base from approximately August 1978 to December 1981. Subsequently, Plaintiff was stationed at Robins Air Force Base from approximately January 1982 through July 1983. Thereafter, Plaintiff was stationed at Dyess Air Force Base from approximately August 1983 through February 2001. However, between January 1995 and January 1996, Plaintiff was stationed at Osan Air Force Base.

19. Plaintiff, GERALD E. ANDREWS, regularly obtained and consumed drinking water from the aforementioned Air Force Bases. As a result, Plaintiff was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with hypogonadism as a result of his exposure.

20. Plaintiff, MARY MARGARET BAKER, is a resident and citizen of Standish, Michigan. Plaintiff is a former Air Force Officer stationed at the

Wurtsmith Air Force Base, Lajes Air Base, Nellis Air Force Base, F.E. Warren Air Force Base, Lackland Air Force Base, and Joint Base McGuire-Dix-Lakehurst. During her military service, Plaintiff's primary duties included patrolling the bases.

21. Plaintiff, MARY MARGARET BAKER, was stationed at Wurtsmith Air Force Base for four years from 1988 through 1992. Thereafter, Plaintiff was transferred to Lajes Air Base in Portugal from 1992 through 1994. Plaintiff was stationed at Nellis Air Force Base from 1994 through 1998. Plaintiff was stationed at F.E. Warren Air Force Base from 1998 through 1994. In between Plaintiff's service at F.E. Warren Air Force Base, Plaintiff was also stationed at Lackland Air Force Base from September 1987 through December 1987 and Joint Base McGuire-Dix-Lakehurst from January 1988 through February 1988. Plaintiff finished her service at the F.E. Warren Air Force Base from 1998 through 2002.

22. Plaintiff, MARY MARGARET BAKER, regularly obtained and consumed her drinking water from each of the aforementioned Air Force Bases. As a result, she was exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with hyperthyroidism as a result of her exposure.

23. Plaintiff, JOHN FRANKLIN BISHOP, is a resident and citizen of Valdosta, Georgia. During his military service, Plaintiff was stationed at Mather Air Force Base, Wurtsmith Air Force Base, and Moody Air Force Base. Plaintiff's primary duties at Mather Air Force Base included work as an Aerospace Ground

Equipment Driver aka AGE Driver. Plaintiff's primary duties at Wurtsmith Air Force Base included work as a Transportation Specialist/Driver and Aviation Resource Management where he was tasked with cleaning up firefighter foam when the foam was activated in hangers. Plaintiff's primary duties at Moody Air Force Base included Aviation Resource Management. During his civilian service at Moody Air Force Base, Plaintiff's position is that of a Bombing Range Coordinator.

24. Plaintiff, JOHN FRANKLIN BISHOP, was stationed at Mather Air Force Base from approximately 1984 through 1986. Thereafter Plaintiff was stationed at Wurtsmith Air Force Base from approximately 1986 through 1992. Plaintiff was stationed at Moody Air Force Base from approximately 1992 through 2005 at which time he retired from the military. Plaintiff remained at Moody Air Force Base from approximately 2005 through the present day as a civilian employee.

25. Plaintiff, JOHN FRANKLIN BISHOP, regularly obtained and consumed his drinking water from each of the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with hyperlipidemia and osteoarthritis as a result of his exposure.

26. Plaintiff, JAMES MIKE BUSSEY, is a resident and citizen of Canonsburg, Pennsylvania. Plaintiff is a former Air Force Officer stationed at Chanute Air Force Base, Wurtsmith Air Force Base, and Columbus Air Force Base.

During his military service, Plaintiff's primary duties included aircrew life support specialist, and recalls having proficiency training when needed.

27. Plaintiff, JAMES MIKE BUSSEY, underwent technical school at Chanute Air Force Base for about a month and a half in 1989. Thereafter, Plaintiff was transferred to Wurtsmith Air Force Base from 1989 through 1992. Plaintiff was stationed at the Columbus Air Force Base from 1992 through 1995.

28. Plaintiff, JAMES MIKE BUSSEY, regularly obtained and consumed his drinking water from each of the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with hyperthyroidism and hypogonadism as a result of his exposure.

29. Plaintiff, BRIAN BYLSMA, is a resident and citizen of San Angelo, Texas. Plaintiff is a former Air Force Officer stationed at the Wurtsmith, Columbus, Lackland, Tully, and Goodfellow Air Force Bases. During his military service, Plaintiff's primary duties included security services for the base police.

30. Plaintiff, BRIAN BYLSMA, underwent training at Lackland Air Force base from July 1978 through November 1978. Thereafter, Plaintiff was stationed at Wurtsmith Air Force Base from 1978 through April 1982. Plaintiff was then stationed at Columbus Air Force Base from April 1982 through July 1984. Plaintiff then returned to Wurtsmith Air Force base in 1985 and remained until 1993. Plaintiff

then completed his service at Goodfellow Air Force Base from June 1993 through April 1998.

31. Plaintiff, BRIAN BYLSMA, regularly obtained and consumed his drinking water from each of the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with hypothyroidism as a result of his exposure.

32. Plaintiff, GLENN CARARINI, is a resident and citizen of Cheyenne, Wyoming. Plaintiff is a former Air Force member stationed at Wurtsmith Air Force Base, Misawa Air Base, Loring Air Force Base, and Westover Air Reserve Base. During his military service, Plaintiff's primary duties included transportation duties such as loading airplanes, and then working as an aerial port evacuation squatter, in the medical field.

33. Plaintiff, GLENN CARARINI, was stationed at Loring Air Force Base for six weeks in 1985. Thereafter Plaintiff was transferred to Wurtsmith Air Force Base. Plaintiff was stationed at Wurtsmith Air Force Base from approximately 1985 through 1987. Plaintiff then was stationed at Misawa Air Base from approximately 1987 through 1990. Plaintiff then went into the reserves and was stationed at Westover Air Reserve Base from approximately 1992 through 1997.

34. Plaintiff, GLENN CARARINI, regularly obtained and consumed his drinking water from each of the aforementioned Air Force Bases. He also was

sprayed with Aqueous Film Forming Foam during celebrations at Wurtsmith and for exercises. As a result, he was exposed to PFAS chemicals through his water supply and service. Plaintiff was later diagnosed with hypothyroidism as a result of his exposure.

35. Plaintiff, KEVIN CARPENTER, is a resident and citizen of Tuscan, Arizona. Plaintiff is a former Air Force Officer stationed at the Wurtsmith Air Force Base. During his military service, Plaintiff's primary duties included working as a security policeman in the military. He was also a private security officer under a civilian contract.

36. Plaintiff, KEVIN CARPENTER, was stationed at Lackland Air Force Base for six weeks while he underwent basic training at the Security Police Academy. Thereafter, Plaintiff was transferred to Wurtsmith Air Force Base in Michigan from 1974-1978.

37. Plaintiff, KEVIN CARPENTER, regularly obtained and consumed his drinking water from the aforementioned Air Force Base. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with chronic kidney disease as a result of his exposure.

38. Plaintiff, JEFFREY CHANDLER, is a resident and citizen of Clio, Michigan. Plaintiff is a former Air Force member stationed at Andersen Air Force Base, Wurtsmith Air Force Base, Ramstein Air Base, and Edwards Air Force Base.

During his military service, Plaintiff was in the security forces. He was a police officer, sergeant, corrections officer, member of an EST team, and law enforcement patrol supervisor.

39. Plaintiff, JEFFREY CHANDLER, was stationed at Anderson Air Force Base from approximately 1980 through 1982. Plaintiff next was stationed at Wurtsmith Air Force Base from 1982 to 1985. Plaintiff then was stationed at Ramstein Air Base from approximately 1985 through 1988 and finished his service at Edwards Air Force Base from 1988 through 1989.

40. Plaintiff, JEFFREY CHANDLER, regularly obtained and consumed his drinking water from each of the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with rheumatoid arthritis as a result of his exposure.

41. Plaintiff, LEAANN MARY CLARK, is a resident and citizen of South Haven, Michigan. Plaintiff was a minor dependent while her father was stationed at Mather Air Force Base, Wurtsmith Air Force Base, and Griffiss Air Force Base.

42. Plaintiff, LEAANN MARY CLARK, was a military dependent relative residing on Mather Air Force Base from approximately 1978 through 1979, Wurtsmith Air Force Base from approximately 1980 through 1982 and 1985 through 1990, and Griffiss Air Force Base from approximately 1982 through 1985.

43. Plaintiff, LEAANN MARY CLARK, regularly obtained and consumed her drinking water from each of the aforementioned Air Force Bases. As a result, she was exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with hypothyroidism and endometriosis as a result of her exposure.

44. Plaintiff, ZOANNE CLARK, is a resident and citizen of Gardner, Kansas. Plaintiff is a former resident of Wurtsmith Air Force Base, Mather Air Force Base, and Griffiss Air Force Base. Plaintiff was married to a military member and worked in the Post office of Wurtsmith Air Force Base for less than a year from 1989 through 1990.

45. Plaintiff, ZOANNE CLARK, resided at Mather Air Force Base from November 1978 until December 1979. Thereafter, Plaintiff resided at Wurtsmith Air Force Base from approximately January 1980 through September 1982. Plaintiff next resided at Griffiss Air Force Base from about September 1982 through September 1985. Plaintiff returned to Wurtsmith Air Force Base from September 1985 until March 1990.

46. Plaintiff, ZOANNE CLARK, regularly obtained and consumed her drinking water from each of the aforementioned Air Force Bases. As a result, she was exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with chronic kidney disease as a result of her exposure.

47. Plaintiff, ASHLEE CODY, is a resident and citizen of Edmond, Oklahoma. Plaintiff is a former resident and was employed at the Wurtsmith Air Force Base. During her residence and employment, Plaintiff's primary duties included working in squadron parties and being involved in air shows.

48. Plaintiff, ASHLEE CODY, was born and resided on Wurtsmith Air Force Base from 1983 to 1991. Plaintiff's father was in the military at Wurtsmith, and her mother worked there as well.

49. Plaintiff, ASHLEE CODY, regularly obtained and consumed her drinking water from Wurtsmith Air Force Base. As a result, she was exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with endometritis, pregnancy-induced hypertension, pre-eclampsia, and hyperuricemia as a result of her exposure.

50. Plaintiff, JOHN DICKEY, is a resident and citizen of Boardman, Ohio. Plaintiff is a former Air Force Officer stationed at the Wurtsmith Air Force Base. During his military service, Plaintiff primarily worked as a missile systems technician.

51. Plaintiff, JOHN DICKEY, was stationed at Wurtsmith Air Force Base from 1986 through 1989.

52. Plaintiff, JOHN DICKEY, regularly obtained and consumed his drinking water from Wurtsmith Air Force Base. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with osteoarthritis and osteoporosis as a result of his exposure.

53. Plaintiff, DENNIS EDWARDS, is a resident and citizen of Defiance, Ohio. Plaintiff is a former resident of and near Wurtsmith Air Force Base and a former Air Force member stationed at the Shaw Air Force Base, Naval Air Station Keflavik, Bergstrom Air Force Base, and Seymour Johnson Air Force Base. During his military service, Plaintiff was an aerospace ground equipment technician and trained with Aqueous Film Forming Foam yearly.

54. Plaintiff, DENNIS EDWARDS, resided on Wurtsmith Air Force Base from approximately 1969 through 1974. He resided immediately off the base from 1974 until 1977. Plaintiff was thereafter stationed at Shaw Air Force Base from approximately 1978 through 1981. Plaintiff next was stationed at Keflavik from 1981 to 1985. Plaintiff then was stationed at Bergstrom Air Force Base from approximately 1985 through 1991 and finished his service at Seymour Johnson Air Force Base from 1991 through 2000.

55. Plaintiff, DENNIS EDWARDS, regularly obtained and consumed his drinking water from each of the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed

with renal cell carcinoma (kidney cancer), hyperlipidemia, and osteoporosis as a result of his exposure.

56. Plaintiff, SHARON LEE FLOYD, is a resident and citizen of Camden, Tennessee. Plaintiff is a former Air Force Officer stationed at Wurtsmith Air Force Base, Lackland Air Force Base, Keesler Air Force Base, and Travis Air Force Base. During her military service, Plaintiff's primary duties included her work as a radial operator, as well as performing as a combat crew specialist.

57. Plaintiff, SHARON LEE FLOYD, was stationed at Lackland Air Force Base for approximately eight weeks in 1984 for basic training. Thereafter, Plaintiff then completed operator technical school training at Keesler Air Force Base from approximately September 1984 through December 1984. Plaintiff completed her service on Wurtsmith Air Force Base from approximately March 1987 through August 1990. Plaintiff lived as a civilian on Travis Air Force Base with her husband from approximately January 1994 through 1997.

58. Plaintiff, SHARON LEE FLOYD, regularly obtained and consumed her drinking water from each of the aforementioned Air Force Bases. As a result, she was exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with hypothyroidism and osteoporosis as a result of her exposure.

59. Plaintiff, MINDY GIANETTINO, is a resident and citizen of Blair, Oklahoma. Plaintiff is a former resident and employee on the Wurtsmith Air Force

Base. During her residence and employment, Plaintiff's primary duties included working as a customer service clerk.

60. Plaintiff, MINDY GIANETTINO, was a resident of Wurtsmith Air Force Base from 1985 through 1991. Her husband was in the Air Force, so their family resided on the base along with him.

61. Plaintiff, MINDY GIANETTINO, regularly obtained and consumed her drinking water from Wurtsmith Air Force Base. As a result, she was exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with hypothyroidism and osteoporosis as a result of her exposure.

62. Plaintiff, PATRICIA A. GODOY, is a resident and citizen of Oscoda, MI. Plaintiff is a former Army and Air Force Exchange Service Officer working on Wurtsmith Air Force Base. During her military service, her primary duties included working at the AAES store.

63. Plaintiff, PATRICIA A. GODOY, was stationed at Wurtsmith Air Force Base from approximately 1975 through 1993. Additionally, Plaintiff resided in Oscoda, Michigan between 1969 and 1999, in off-base military housing, in close proximity to the Wurtsmith Air Force Base.

64. Plaintiff, PATRICIA A. GODOY, regularly obtained and consumed drinking water from the aforementioned Air Force Bases. As a result, Plaintiff was

exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with hypothyroidism as a result of her exposure.

65. Plaintiff, MICHAEL HALL, is a resident and citizen of Shirley, Indiana. Plaintiff was a former refueling specialist while stationed at the Lackland, Chanute, and Wurtsmith Air Force Bases. During his military service, Plaintiff's primary duties included storing, receiving, and distributing fuels, liquid oxygen, liquid nitrogen, and water.

66. Plaintiff, MICHAEL HALL, was stationed at Lackland Air Force Base in 1989 for approximately six months. Plaintiff was then stationed at Chanute Air Force Base from approximately 1989 through 1990. Plaintiff finished his service at Wurtsmith Air Force Base from approximately 1990 through 1992.

67. Plaintiff, MICHAEL HALL, regularly obtained and consumed his drinking water from the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with chronic kidney disease as a result of his exposure.

68. Plaintiff, SABRINA HAMMEL, is a resident and citizen of San Antonio, Texas. Plaintiff is a former military spouse who resided on Wurtsmith Air Force Base.

69. Plaintiff, SABRINA HAMMEL, resided on Wurtsmith Air Force Base from approximately 1974 through 1978.

70. Plaintiff, SABRINA HAMMEL, regularly obtained and consumed her drinking water from the aforementioned Air Force Base. As a result, she was exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with hypothyroidism as a result of her exposure.

71. Plaintiff, MARVIS HANBAUM, is a resident and citizen of Joliet, Illinois. Plaintiff is a former military spouse who resided at Wurtsmith Air Force Base, KI Sawyer Air Force Base, and Davis-Monthan Air Force Base.

72. Plaintiff, MARVIS HANBAUM, resided on Wurtsmith Air Force Base for two years, from approximately 1975 through 1977. Plaintiff later resided at K.I. Sawyer Air Base for two years, from approximately 1979 through 1980. Lastly, Plaintiff resided on Davis-Monthan Air Force Base for approximately six months from 1980 through 1981.

73. Plaintiff, MARVIS HANBAUM, regularly obtained and consumed her drinking water from the aforementioned Air Force Bases. As a result, she was exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with ulcerative colitis with other complications, parathyroid adenoma, primary hyperparathyroidism, and hypercalcemia as a result of her exposure.

74. Plaintiff, RODNEY HANBAUM, is a resident and citizen of Anna, Illinois. Plaintiff was a former Security Police, Law Enforcement Officer, and K-9 Specialist stationed at the Lackland, Camp Bullis, Wurtsmith, Osan, KI Sawyer,

March, and Davis-Monthan Air Force Bases. During his military service, Plaintiff's primary duties consisted of general police work on base, responding to bomb threats/searching for bombs, providing priority resources, and providing perimeter security.

75. Plaintiff, RODNEY HANBAUM, was stationed at Lackland Air Force Base for training in 1975 for approximately 6 months, including an approximately 3 through 4-week period at Camp Bullis. Next, Plaintiff was stationed at Wurtsmith Air Force Base for two years, from approximately 1975 through 1977. Plaintiff was next stationed at Osan Air Force Base in South Korea from approximately 1977 through 1978. Plaintiff was later stationed at KI Sawyer Air Base from approximately 1979 through 1987. Plaintiff was relocated to different bases throughout his time spent at KI Sawyer. Plaintiff was stationed at Davis-Monthan Air Force Base for approximately six months from 1980 through 1981. Plaintiff was also stationed at March Air Force Base (n/k/a March Air Reserve Base) from approximately March 1985 through October 1985.

76. Plaintiff, RODNEY HANBAUM, regularly obtained and consumed his drinking water from the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with gout, hyperlipidemia, hypothyroidism, and lymphocytic colitis as a result of his exposure.

77. Plaintiff, VIVIAN HENRY, is a resident and citizen of Union City, Georgia. Plaintiff is a former resident of the Wurtsmith Air Force Base, Maxwell Air Force Base, and F.E. Warren Air Force Base. Plaintiff was a resident of said bases as she was the child of a military member.

78. Plaintiff, VIVIAN HENRY, resided on Wurtsmith Air Force Base from 1980 through 1983. She resided on or near Maxwell Air Force Base from 1984 through 1985. Finally, she resided on or near F.E. Warren Air Force Base from 1989 through 1991.

79. Plaintiff, VIVIAN HENRY, regularly obtained and consumed her drinking water from each of the aforementioned Air Force Bases. As a result, she was exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with endometriosis, osteoarthritis, and hyperlipidemia as a result of her exposure.

80. Plaintiff, DESIDERIO JAUREGUI, is a resident and citizen of Saco, Maine. Plaintiff is a former Air Force Officer stationed at the Schuster Air Force Base, Barksdale Air Force Base, Wurtsmith Air Force Base, Tinker Air Force Base, Howard Air Force Base, Tindouf Air Force Base, Incirlik Air Force Base, and Davis-Monthan Air Force Base. During his military service, Plaintiff's primary duties

included Medical Administration and Resource management, as well as overseeing the records department.

81. Plaintiff, DESIDERIO JAUREGUI, was stationed at Schuster Air Force Base from approximately 1984 through 1987. Plaintiff was then stationed at Barksdale Air Force Base from 1988 through 1988. Plaintiff was then stationed at the Wurtsmith Air Force Base from 1988 through 1991. Plaintiff was also located at Tinker Air Force Base from 1991 through 1998, Howard Air Force Base from 1998 through 2000, and the Tindouf Air Force Base from 2000 through 2002. Plaintiff finished his service at the Incirlik Air Force Base from 2002 through 2004. Plaintiff also recalls being stationed at the Davis-Monthan Air Force Base from 2004 through 2006.

82. Plaintiff, DESIDERIO JAUREGUI, regularly obtained and consumed his drinking water from each of the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with prostate cancer and hyperthyroidism as a result of his exposure.

83. Plaintiff, BRENDA L. KAPPEN, is a resident and citizen of Whitesboro, Texas. Plaintiff is a former Air Force Officer stationed at the Lackland Air Force Base, Fort Dix, and Wurtsmith Air Force Base. During her military service, Plaintiff's primary duties included security services for the base police.

84. Plaintiff, BRENDA L. KAPPEN, underwent basic training at Lackland Air Force Base and Fort Dicks in 1989. Thereafter, Plaintiff was stationed at Wurtsmith Air Force Base from November 1989 through June 1991.

85. Plaintiff, BRENDA L. KAPPEN, regularly obtained and consumed her drinking water from each of the aforementioned Air Force Bases. As a result, she was exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with hypothyroidism and hyperlipidemia as a result of her exposure.

86. Plaintiff, STEVEN DALE KIRIAN, is a resident and citizen of Oregon, Ohio. Plaintiff is a former Air Force Officer stationed at the Fort Sam Houston Base and the Wurtsmith Air Force Base. During his military service, Plaintiff's primary duties included patrolling on the flight line with aircrafts as a security police.

87. Plaintiff, STEVEN DALE KIRIAN, was stationed at Wurtsmith Air Force Base from approximately October 1976 through June 1980.

88. Plaintiff, STEVEN DALE KIRIAN, regularly obtained and consumed his drinking water from Wurtsmith Air Force Base. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with prostate cancer as a result of his exposure.

89. Plaintiff, MELVA E. KOEPKE, is a resident and citizen of Base City, Michigan. Plaintiff is a former Air Force Medical Administrator stationed in various

cities and air force bases throughout her Air Force career. During her military service, her primary duties included medical administrative tasks for Air Force hospitals.

90. Plaintiff, MELVA E. KOEPKE, was stationed at Lackland Air Force Base for approximately six weeks while she underwent basic training in November 1967 through December 1967. Thereafter, Plaintiff was transferred to Sheppard Air Force Base where she underwent technical school from approximately December 1967 through February 1968. From there, Plaintiff was stationed at Offutt Air Force Base from approximately November 1970 through September 1971. Subsequently, Plaintiff was stationed at Wurtsmith Air Force Base from approximately November 1971 through May 1973.⁹ Following Plaintiff's stationing on Wurtsmith Air Force Base, Plaintiff was stationed at the Air Force Academy Air Force Base (Colorado) from approximately May 1973 through April 1978. Following Plaintiff's time on Air Force Academy Air Force Base (Colorado), Plaintiff was stationed at Hickam Air Force Base from approximately April 1978 through June 1984. Then Plaintiff was stationed at Randolph Air Force Base from approximately July 1984 through July 1990. Plaintiff's final station, before retiring from the Air Force, was Brooks

⁹ Plaintiff was stationed at Wurtsmith Air Force Base from approximately November 1971 through January 1972. Thereafter, Plaintiff was moved to off base-housing female housing in Oscoda, Michigan where Plaintiff resided from approximately January 1972 through May 1973. Plaintiff's off-base housing was serviced by the same water source as Wurtsmith Air Force Base.

Air Force Base, where Plaintiff was stationed from approximately July 1990 through February 1993.

91. Plaintiff, MELVA E. KOEPKE, regularly obtained and consumed drinking water from the aforementioned Air Force Bases. As a result, Plaintiff was exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with breast cancer, osteoporosis, osteoarthritis, ulcerative colitis, and hyperlipidemia as a result of her exposure.

92. Plaintiff, TERRY KRAWCZAK, is a resident and citizen of Saginaw, Michigan. Plaintiff is a former Air Force Officer stationed at the Wurtsmith Air Force Base. During his military service, Plaintiff's primary duties included working as an aircraft mechanic on the flight line and hanger. He was also a maintenance specialist.

93. Plaintiff, TERRY KRAWCZAK, was previously stationed at Lackland Air Force Base, Chanute Air Force Base, and Selfridge Air Force Base. Thereafter, Plaintiff was transferred to Wurtsmith Air Force Base in Michigan from 1976 to 1977.

94. Plaintiff, TERRY KRAWCZAK, regularly obtained and consumed his drinking water from the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with renal cell carcinoma as a result of his exposure.

95. Plaintiff, DONNA JO LANSKY, is a resident and citizen of East Tawas, Michigan. Plaintiff is a former resident of Wurtsmith Air Force Base, Selfridge Air National Guard Base, and George Air Force Base. Plaintiff was a resident of said bases as she was the child of a military member.

96. Plaintiff, DONNA JO LANSKY, resided at Wurtsmith Air Force Base from approximately 1969 through 1973. Plaintiff resided at Selfridge Air National Guard Base and George Air Force Base from approximately 1973 through 1979.

97. Plaintiff, DONNA JO LANSKY, regularly obtained and consumed her drinking water from both of the aforementioned Air Force Bases. As a result, she was exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with thyroid cancer, hyperlipidemia, and endometriosis as a result of her exposure.

98. Plaintiff, STUART MAHAFFEY, is a resident and citizen of Mentor, Ohio. Plaintiff is a former resident of the Wurtsmith Air Force Base. Plaintiff worked as a civilian in the military. During residency, Plaintiff's primary role was NCO open mess management and Plaintiff handled various convenience stores for the moral recreation division throughout the facility.

99. Plaintiff, STUART MAHAFFEY, was stationed at Lackland Air Force from November 1980 through January 1981, Wurtsmith Air Force Base from

January 1981 through February 1983, and Keesler Air Force Base from February 1982 through March 1982. Thereafter, he returned to Wurtsmith.

100. Plaintiff, STUART MAHAFFEY, regularly obtained and consumed his drinking water from the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with kidney cancer as a result of his exposure.

101. Plaintiff, DEROLD MARTIN, is a resident and citizen of South Wisconsin Rapids, Wisconsin. Plaintiff is a former service member of the United States Air Force. While in the Air Force, Plaintiff's primary duties included security and law enforcement services such as guarding airplanes and weapons.

102. Plaintiff, DEROLD MARTIN, underwent basic training at Lackland Air Force Base in 1982. Thereafter, he resided on Wurtsmith Air Force Base from 1982 through 1986. Plaintiff was then transferred to Keflavik Air Force Base from 1986 through 1987. Thereafter, Plaintiff was stationed at K.I. Sawyer Air Force Base from 1987 through 1995. Plaintiff was then stationed at Grand Forks Air Force Base from 1995 through 1998 and ended his service at Nellis Air Force Base from 1998 through 2005.

103. Plaintiff, DEROLD MARTIN, regularly obtained and consumed his drinking water from each of the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was also directly

exposed to AFFF by virtue of his service duties on K.I. Sawyer Air Force Base, as he was the first responder to an airplane crash. Plaintiff was later diagnosed with ulcerative colitis and small lymphocytic lymphoma as a result of his exposure.

104. Plaintiff, MELISSA McFADDEN, is a resident and citizen of Granville, OH. Plaintiff was a former security specialist, stationed at Lackland Air Force Base, Joint Base McGuire-Dix-Lakehurst, Wurtsmith Air Force Base, and Pirinclik Air Force Base. During her military service, Plaintiff's primary duties included guarding the flightline and other various areas and equipment on the airfield.

105. Plaintiff, MELISSA McFADDEN, was stationed at Lackland Air Force Base for basic training and technical school from approximately November 1988 through January 1989. Plaintiff was then transferred to Joint Base McGuire-Dix-Lakehurst for Air Base Ground Defense training from approximately March 1989 through April 1989. Plaintiff was then stationed at Wurtsmith Air Force Base from approximately August 1989 through 1991. Plaintiff finished her service at Pirinclik Air Force Base from approximately November 1991 through December 1992.

106. Plaintiff, MELISSA McFADDEN, regularly obtained and consumed her drinking water from the aforementioned Air Force Bases. As a result, she was exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with focal segmental glomerulosclerosis with hyalinosis, hypertensive kidney

disease with chronic kidney disease, hyperuricemia, gout due to renal impairment, and end-stage renal disease as a result of her exposure.

107. Plaintiff, DELORIS GAIL MICHALAK, is a resident and citizen of Toledo, Ohio. Plaintiff was a military spouse while her husband was stationed at Wurtsmith Air Force Base.

108. Plaintiff, DELORIS GAIL MICHALAK, was a military dependent spouse residing on Wurtsmith Air Force Base from approximately 1977 through 1980.

109. Plaintiff, DELORIS GAIL MICHALAK, regularly obtained and consumed her drinking water from each of the aforementioned Air Force Bases. As a result, she was exposed to PFAS chemicals through her water supply. Plaintiff was later diagnosed with hyperlipidemia and osteoporosis as a result of her exposure.

110. Plaintiff, MARK PARKS, is a resident and citizen of Gold Hill, Oregon. Plaintiff is a former medical material specialist for the United States Air Force. During his military service his primary duties included supply chain management for all medical supplies at different facilities.

111. Plaintiff, MARK PARKS, underwent training at Lackland Air Force Base and Sheppard Air Force Base in 1977. Thereafter, Plaintiff was stationed at Wurtsmith Air Force Base from June 1977 through January 1980.

112. Plaintiff, MARK PARKS, regularly obtained and consumed his drinking water from the aforementioned Air Force Bases. As a result, Plaintiff was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with prostate cancer as a result of his exposure.

113. Plaintiff, ROBERT ALAN POTTS, is a resident and citizen of Oviedo, Florida. Plaintiff is a former Air Force Officer stationed at the Keesler Air Force Base, Dyess Air Force Base, Okinawa Wake Island Air Force Base, and the Wurtsmith Air Force Base. During his military service, Plaintiff's primary duties included being the in-flight receiving specialist and was on the crew air fueling, boom and cargo loading and unloading, weight distribution, and assistant navigator. Plaintiff also worked as an auto tracker radar repairman and operator.

114. Plaintiff, ROBERT ALAN POTTS, was stationed at Wurtsmith Air Force Base from 1947 through 1978. Thereafter, Plaintiff was transferred to the Guam Air Force Base from 1972 through 1973, the Dyess Air Force Base from 1973 through 1974 and then the Okinawa Air Force Base from 1974 through 1983. Plaintiff finished his service at the Wurtsmith Air Force Base from 1983 through 1992.

115. Plaintiff, ROBERT ALAN POTTS, regularly obtained and consumed his drinking water from each of the aforementioned Air Force Bases. As a result, he

was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with hyperlipidemia and prostate cancer as a result of his exposure.

116. Plaintiff, RICKY SEXTON, is a resident and citizen of Willard, Ohio. Plaintiff is a former Air Force Officer stationed at the Wurtsmith Air Force Base, Offutt Air Force Base, and Minot Air Force Base. During his military service, Plaintiff's primary duties included his work as a security police officer, an aerospace photographic specialist, and a tactical security flight sergeant.

117. Plaintiff, RICKY SEXTON, was stationed at Wurtsmith Air Force Base from March 1980 through December 1982. Plaintiff was then transferred to Offutt Air Force Base from December 1982 through October 1983. Plaintiff finished his service at the Minot Air Force Base from approximately March 1985 through July 1986, where he was honorably discharged.

118. Plaintiff, RICKY SEXTON, regularly obtained and consumed his drinking water from each of the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with chronic kidney disease as a result of his exposure.

119. Plaintiff, LAMAR B. TAYLOR, is a resident and citizen of Greensboro, North Carolina. Plaintiff is a former Air Force Officer stationed at the Wurtsmith Air Force Base, Clinton-Sherman Air Force Base in Oklahoma, and March Air Force Base (n/k/a March Air Reserve Base) in California. During his

military service, Plaintiff's primary duties included aircraft mechanics and crew chief.

120. Plaintiff, LAMAR B. TAYLOR, was stationed at Wurtsmith Air Force Base from 1986 through 1990. During his time at Wurtsmith Air Force Base, he attended March Air Force Base in California for 30 days in 1988 and Clinton Sherman Air Force Base in Oklahoma for 30 days in 1989.

121. Plaintiff, LAMAR B. TAYLOR, regularly obtained and consumed his drinking water from each of the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with hyperthyroidism as a result of his exposure.

122. Plaintiff, WAYNE ROGER THOMAS, is a resident and citizen of Lancaster, Ohio. Plaintiff is a former Air Force Officer stationed at the Wurtsmith Air Force Base, Kelly Field, Ft. Sheridan, Kirtland Air Force Base, and Wright Patterson Air Force Base. During his military service, Plaintiff primarily installed computers at military processing centers, worked in Air Force recruiting, and worked as a jet engine mechanic.

123. Plaintiff, WAYNE ROGER THOMAS, had a twenty-year military career. During his career, he was stationed at Lackland Air Force Base in 1970. Plaintiff was stationed at Kelly Air Force Base from approximately 1971 through

1973. Plaintiff was stationed at Kirtland Air Force Base from 1973 to 1978. He was also stationed at Fort Sheridan Air Force Base from 1978 to 1982 and Wright Patterson from 1982 to 1986. In 1982 Plaintiff returned to Lackland Air Force Base for approximately 6 weeks. Plaintiff finished his service at Wurtsmith Air Force Base where he was stationed from 1986 through 1990.

124. Plaintiff, WAYNE ROGER THOMAS, regularly obtained and consumed his drinking water from each of the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was later diagnosed with osteoporosis as a result of his exposure.

125. Plaintiff, CYPRIAN EDWARD YOST, is a resident and citizen of Media, Pennsylvania. Plaintiff is a former Air Force Officer stationed at the Wurtsmith Air Force Base. During his military service, Plaintiff's primary duties included cooking and food service.

126. Plaintiff, CYPRIAN EDWARD YOST, was stationed at Lackland Air Force Base for about 6 weeks for training. Thereafter, Plaintiff was transferred and finished his service at the Wurtsmith Air Force Base from 1986 through 1988.

127. Plaintiff, CYPRIAN EDWARD YOST, regularly obtained and consumed his drinking water from each of the aforementioned Air Force Bases. As a result, he was exposed to PFAS chemicals through his water supply. Plaintiff was

later diagnosed with hyperlipidemia, hypogonadism, and osteoarthritis as a result of his exposure.

B. Defendants

128. Upon information and belief, Defendants' Fluorochemical Products including, but not limited to, PFOA and PFOS containing fluorochemicals/intermediates and AFFF, were used at the military installation(s) at which Plaintiffs resided and worked, fire training facilities, and/or fire departments such that those compounds traveled by stormwater, surface water, groundwater, and contaminated Plaintiffs' drinking water supply and/or chemical exposure through dermal and inhalation exposure pathways. Defendants' Fluorochemical Products have also been used and disposed of into wastewater systems and the environment in general, causing contamination to stormwater, surface water, and groundwater that traveled to Plaintiffs' drinking water supply.

129. Defendant 3M Company (f/k/a Minnesota Mining and Manufacturing Company) ("3M") is a corporation organized and existing under the laws of the State of Delaware, having its principal place of business at 3M Center, St. Paul, Minnesota 55133 and is registered to do business in Michigan. Beginning before 1970 and until at least 2002, 3M manufactured, distributed, and sold Fluorochemical Products. 3M manufactured, distributed, and sold AFFF containing PFAS throughout the United States, including in Michigan. 3M researched, developed, manufactured, designed,

marketed, distributed, released, promoted, and/or otherwise sold products and raw materials containing PFAS in markets around the country, including within Michigan, since at least the 1970s. The sale of these chemicals was volitional and intentionally directed at the Michigan market, and defendants thereby availed themselves of Michigan laws.

130. AGC Chemicals Americas Inc. (“AGC”) is a corporation organized and existing under the laws of Delaware, having a principal place of business in 5 East Uwchlan Avenue, Suite 201, Exton, PA 19341. AGC and/or its affiliates manufactured fluorochemicals used in AFFF. AGC does and/or has done business throughout the United States, including in Michigan, and is registered to do business in Michigan. On information and belief, AGC is the North American subsidiary of AGC Inc. (f/k/a Asahi Glass, Co., Ltd.) and does business throughout the United States, including in Michigan.

131. Defendant Amerex Corporation (“Amerex”) is an Alabama corporation and does business throughout the United States. Amerex has its principal place of business at 7595 Gadsden Highway, Trussville, Alabama 35173. Amerex made, manufactured, distributed, marketed, and/or sold fluorochemical products throughout the United States, including conducting business in Michigan.

132. Defendant Archroma U.S., Inc. (“Archroma”) is a Delaware corporation with its principal place of business located at 5435 77 Center Dr., #10,

Charlotte, North Carolina 28217. Upon information and belief, Archroma U.S., Inc. is a subsidiary of Archroma Management, LLC, and supplied Fluorochemical Products for use in AFFF sold throughout the United States, including in Michigan. On information and belief, Archroma is a successor to Clariant.

133. Defendant Arkema, Inc. (“Arkema”) is a corporation organized and existing under the laws of Pennsylvania, having a principal place of business at 900 First Avenue, King of Prussia, PA 19406. Arkema and/or its predecessors manufactured fluorosurfactants used in AFFF. Arkema is a successor in interest to Atochem North American, Inc., Elf Atochem North America, Inc., and Atofina Chemicals, Inc. and does and/or has done business throughout the United States, including in Michigan.

134. Defendant Buckeye Fire Equipment (“Buckeye”) is a North Carolina corporation that does business throughout the United States, including conducting business in Michigan. Buckeye has its principal place of business in Kings Mountain, North Carolina. Buckeye developed, manufactured, marketed, distributed, released, sold, and/or used PFAS, PFAS materials, and products containing PFAS in turnouts and/or Class B foams, including in Michigan.

135. Carrier Global Corporation (“Carrier”) is a Delaware corporation with its principal place of business located at 13995 Pasteur Boulevard, Palm Beach Gardens, Florida 33418. Upon information and belief, UTC is now a division of

Carrier and manufactured and sold fluorochemical products. Upon information and belief, Carrier does and/or has done business throughout the United States, including Michigan. Carrier inherited UTC's Fire & Security businesses, including the Chubb Fire and Kidde-Fenwal brands, when it was formed in March 2020. Carrier is now the parent corporation of Kidde-Fenwal Inc., a manufacturer of fluorochemical products.

136. Defendant ChemDesign Corporation ("ChemDesign") is a Massachusetts corporation with its principal place of business in Fitchburg, Massachusetts. ChemDesign is a wholly-owned subsidiary of Chestnut Acquisition Corporation ("Chestnut"), a Delaware corporation with its principal place of business in New Jersey. ChemDesign Products, Inc. manufactured fluorochemical products for use in Tyco/Chemguard AFFF products.

137. Defendant Chemguard, Inc. is a Texas corporation with its principal place of business at One Stanton Street, Marinette, Wisconsin 54143. Beginning in or around 1994, Chemguard began manufacturing AFFF that contained PFOA. Upon information and belief, Chemguard manufactured, distributed, and/or sold AFFF foam containing PFOA throughout the United States including in Michigan. Upon information and belief, Chemguard manufactured, distributed, and/or sold AFFF foam containing PFOA in Michigan and which has contaminated Plaintiffs' drinking water supply.

138. Defendant Chemours Company (“Chemours”) is a corporation duly organized under the laws of the State of Delaware, with its principal place of business located at 1007 Market Street, Wilmington, Delaware 19899. Chemours does business throughout the United States, including conducting business in Michigan. Chemours was a wholly owned subsidiary of Old DuPont. In July 2015, Old DuPont completed its spin-off of Chemours as a separate, publicly traded, entity. Chemours has since then received and begun manufacturing certain product lines from Old DuPont, including some product lines involving manufacture, sale, and distribution of PFAS-containing intermediates and Fluorochemical Products. In connection with the spin-off, Chemours assumed direct liability for Old DuPont’s decades-long history of causing widespread PFAS contamination in Michigan, around the country, and indeed the world.

139. Defendant Clariant Corporation (“Clariant”) is a New York corporation with its principal place of business at 4000 Monroe Road, Charlotte, North Carolina. Clariant research, developed, manufactured, designed, marketed, distributed, released, promoted, and otherwise sold PFAS and fluorochemical products, including AFFF, in markets around the United States, including within Michigan.

140. Defendant Corteva, Inc. (“Corteva”) is a Delaware incorporated company with its principal place of business at 974 Centre Road, Building 730, Wilmington, Delaware 19805. Corteva is one of the spin-off companies from

DowDuPont, Inc., and is believed to have assumed some of the PFAS liabilities of Old Dupont.

141. Defendant Deepwater Chemicals, Inc. (“Deepwater”) is a corporation organized under the laws of Delaware, with its principal place of business located at 196122 E County Road 40, Woodward, OK, 73801. On information and belief, Deepwater Chemicals designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products throughout the United States.

142. Dynax Corporation (“Dynax”) is a corporation organized and existing under the laws of Delaware and having a principal place of business at 79 Westchester Avenue, Pound Ridge, New York 10576 and an address for service of process at 103 Fairview Park Drive Elmsford, New York 10523-1544. On information and belief, Dynax researched, developed, manufactured, designed, marketed, distributed, released, promoted, and otherwise sold PFAS and fluorochemical products, including compounds used in AFFF, throughout the Unified States, including Michigan.

143. Defendant E. I. du Pont de Nemours and Company (“Old DuPont”) is a corporation duly organized under the laws of the State of Delaware, with its principal place of business located at 974 Centre Road, Wilmington, Delaware 19805. Old DuPont has done business throughout the United States, including

conducting business in Michigan, and is registered to do business in Michigan. Old DuPont has been involved in the production and sale of fluorochemical intermediaries for use in AFFF manufacturing since the 1950s. When 3M left the market, Old DuPont took on a larger role in the AFFF market. Old DuPont has also manufactured, distributed, and sold Fluorochemical Products and raw PFAS around the country pursuant to a nationwide marketing campaign, including in Michigan. Also, on information and belief, Old DuPont was engaged in joint ventures and other business arrangements with Michigan entities for the development of Fluorochemical Products.

144. Defendant DuPont de Nemours, Inc., formerly known as DowDuPont Inc. (“New DuPont”) is a corporation duly organized under the laws of the State of Delaware, with its principal place of business at 974 Centre Road, Wilmington, Delaware 19805. New DuPont does business throughout the United States, including in Michigan. New DuPont assumed direct liability for Old DuPont’s decades-long history of causing widespread PFAS contamination in Michigan, around the country, and indeed the world.

145. Defendant Honeywell Safety Products USA, Inc. is a corporation duly organized under the laws of the State of Delaware with its registered place of business in the U.S. at 9680 Old Bailes Road, Fort Mill, SC. Honeywell does business throughout the United States, including in Michigan. Upon information and

belief, Honeywell developed, manufactured, marketed, distributed, released, sold, and/or used PFAS, PFAS materials, and products containing PFAS in turnouts and/or Class B foams, including in Michigan.

146. Defendant PBI Performance Products, Inc. (“PBI”) is a South Carolina corporation that does business throughout the United States, including conducting business in Michigan. PBI has its principal place of business in Northern Charleston, South Carolina. PBI developed, manufactured, marketed, distributed, released, sold, and/or used PFAS, PFAS materials, and products containing PFAS in turnouts and/or Class B foams, including in Michigan.

147. MSA Safety, Inc., is a corporation duly organized under the laws of the State of Pennsylvania. MSA has its principal place of business in Cranberry Township, Pennsylvania. In 2017, MSA acquired Globe Holding Company, LLC and its subsidiaries (collectively, “MSA/Globe”) and continues to do business under the Globe name. MSA developed, manufactured, marketed, distributed, released, sold, and/or used PFAS, PFAS materials, and products containing PFAS in Class B foams, including in Michigan.

148. Defendant National Foam, Inc. (“National Foam,” a/k/a Chubb National Foam) is a corporation organized and existing under the laws of Delaware, having a principal place of business at 141 Junny Road, Angier, North Carolina 27501. National Foam manufactures AFFF agents, including Universal Gold and the

Angus brand of products and is the successor-in-interest to Angus Fire Armour Corporation (collectively, “National Foam/Angus Fire”). At all relevant times, National Foam manufactured and sold fluorochemical products.

149. Defendant Perimeter Solutions, LP, (“Perimeter Solutions”) is a Delaware corporation that does business throughout the United States, including conducting business in Michigan. Perimeter Solutions has a principal place of business at 8000 Maryland Avenue, Suite 350, Clayton, Missouri 653105. In 2019, Perimeter Solutions purchased a products division of Amerex. Perimeter developed, manufactured, marketed, distributed, released, sold, and/or used PFAS, PFAS materials, and products containing PFAS in turnouts and/or Class B foams and AFFF, including in Michigan.

150. Raytheon Technologies is the parent company of United Technologies Corporation (“UTC”) Fire and Security. Upon information and belief, Raytheon Company and Collins Aerospace are subsidiaries of Raytheon Technologies. Raytheon is a corporation organized under the laws of Delaware with its principal place of business at 10 Farm Springs Road, Farmington, Connecticut 06032. On information and belief, Kidde-Fenwal, Inc., a manufacturer of PFAS products, was acquired by UTC in or around 2005. Raytheon does and/or has done business throughout the United States, including Michigan, and manufactured and sold PFAS and/or AFFF containing PFAS.

151. Defendant StedFast USA, Inc. (“StedFast”) is a Delaware corporation that does business throughout the United States, including conducting business in Michigan. StedFast has its principal place of business in Piney Flats, Tennessee. StedFast developed, manufactured, marketed, distributed, released, sold, and/or used PFAS, PFAS materials, and products containing PFAS in turnouts and/or Class B foams, including in Michigan.

152. Defendant Southern Mills Inc. d/b/a TenCate Protective Fabrics (“Tencate”) is a Georgia corporation that does business throughout the United States, including conducting business in Michigan. Tencate’s principal place of business is in Union City, Georgia. Defendant Tencate developed, manufactured, marketed, distributed, released, sold, and/or used PFAS and PFAS products, in turnouts and Class B foams, including in the state of Michigan.

153. Defendants Tyco Fire Products LP and Johnson Controls: Defendant Tyco Fire Products LP (“Tyco”) is a limited partnership formed in the State of Delaware with its principal place of business at 1400 Pennbrook Parkway, Landsdale, Pennsylvania. Tyco is an indirect subsidiary and ultimately wholly owned by Defendant Johnson Controls International PLC, an Irish public limited company listed on the New York Stock Exchange [NYSE: JCI]. Defendant Johnson Controls has its principal place of business at 5757 North Green Bay Avenue, Milwaukee, Wisconsin 53209. Upon information and belief, Tyco and Johnson

Controls have had a services agreement in place since 2016 pursuant to which Johnson Controls provides services to Tyco. Tyco is the successor in interest of The Ansul Company (“Ansul”), having acquired Ansul in 1990. (Ansul and Tyco, as the successor in interest to Ansul, will hereinafter be collectively referred to as “Tyco/Ansul.”) Beginning in or around 1975, Ansul manufactured and/or distributed and sold AFFF that contained fluorochemical surfactants containing PFOA throughout the United States, including in Michigan. After Tyco acquired Ansul in 1990, Tyco/Ansul continued to manufacture, distribute, and sell AFFF that contained fluorocarbon surfactants containing PFOA throughout the United States, including in Michigan. Tyco/Ansul does business throughout the United States including in Michigan. Upon information and belief, Tyco/Ansul manufactured, distributed, and/or sold AFFF foam containing PFOA in Michigan which has contaminated Plaintiffs’ drinking water supply.

154. Defendant W. L. Gore & Associates, Inc., (“Gore”) is a Delaware corporation that does business throughout the United States, including conducting business in Michigan. Gore has its principal place of business in Newark, Delaware. Gore developed, manufactured, marketed, distributed, released, sold, and/or used PFAS, PFAS materials, and products containing PFAS in turnout gears and/or Class B foams, including in Michigan.

155. Any references to a defendant or defendants in this Complaint include any predecessors, successors, parents, subsidiaries, affiliates, and divisions of the named defendants.

JURISDICTION AND VENUE

156. This Court has jurisdiction over the parties and claims brought herein under 28 U.S.C. § 1331. The claims herein arise from exposure to PFAS contaminated water sources on bases operated by the United States Air Force. Many Plaintiffs were exposed as a result of their service duties with the United States Air Force. Where tort claims arise out of toxic exposure to chemicals on federally owned and operated property, federal enclave jurisdiction exists. Therefore, Plaintiffs' claims present a question arising under federal law and are properly brought in this Court.

157. Venue is proper in this District Court pursuant to 28 U.S.C. § 1391 because it is the judicial district in which Plaintiffs were residents and/or citizens, a substantial part of the events or omissions giving rise to the claims occurred, and/or Defendants conduct business within the district.

158. The United States District Court for the Eastern District of Michigan further has personal jurisdiction over the Defendants because at all times relevant to this lawsuit, the Defendants purposefully manufactured, designed, marketed, advertised, distributed, released, promoted and/or otherwise sold (directly or

indirectly) PFAS-containing Fluorochemical Products, including AFFF, to various locations in the United States and Michigan, such that each Defendant knew or should have known that said products would be delivered to areas in Michigan for active use including, but not limited to, during the course of training and firefighting activities, including areas within Plaintiffs' drinking water supply.

159. Plaintiffs are informed and believe, and based thereon allege that, at all relevant times, the Defendants engaged in business in the State of Michigan.

160. Plaintiffs are informed and believe, and based thereon allege that, at all relevant times, the Defendants have engaged in substantial, continuous economic activity in Michigan, including the business of researching, designing, formulating, handling, disposing, manufacturing, labeling, using, testing, distributing, promoting, marketing, selling, advertising and/or otherwise being responsible for PFAS chemicals, and that said activity by the Defendants is substantially connected to the Plaintiffs' claims as alleged herein.

161. Based on information and belief, the Defendants purposefully affiliated themselves with the forum of the State of Michigan giving rise to the underlying controversy.

162. At all times pertinent to this action, the Defendants had actual knowledge that each of the other Defendants was going to intentionally or negligently engage in the tortious misconduct and acts alleged in the causes of action

set forth in this complaint, including but not limited to the acts, failures to act, misrepresentations and breaches of duties of care owed by each of the Defendants to Plaintiffs.¹⁰

163. Therefore, the exercise of jurisdiction over the Defendants by the United States District Court for the Eastern District of Michigan does not offend traditional notions of fair play and substantial justice.

164. Joinder of all parties is proper pursuant to Rule 20(a) of the Federal Rules of Civil Procedure. Defendants are permissively joined in this action because the exposure, injuries, and relief requested all arise out of similar transactions or occurrences and questions of law and fact are common to all parties.

BACKGROUND AND FACTUAL ALLEGATIONS THE PFAS COMPOUNDS

165. PFAS chemicals are a family of chemical compounds containing fluorine and carbon atoms.

166. Aqueous film-forming foam (“AFFF” or “foam-forming chemical”), a form of Long Chain PFAS, is a fire suppressant used to extinguish fires consisting of flammable liquid such as fuels. This PFAS family of chemicals is entirely anthropogenic and do not exist in nature.

¹⁰ EWG, For 50 Years, Polluters Knew PFAS Chemicals Were Dangerous But Hid Risks From Public, https://static.ewg.org/reports/2019/pfa-timeline/3M-DuPont-Timeline_sm.pdf?_ga=2.39807139.1262723487.1643418367-1574750726.1643418367

167. As a family of PFAS, AFFF products are persistent, toxic, and bio-accumulative, as well as highly mobile in soil and groundwater.¹¹

168. Exposure to PFAS has been associated with several negative health outcomes in both humans and animals, including, but not limited to, chronic medical conditions and cancers.¹²

169. The U.S. Environmental Protection Agency (EPA) has noted that “drinking water can be an additional source [of PFOA/PFOS in the body] in the small percentage of communities where these chemicals have contaminated water supplies.” In communities with contaminated water supplies, “such contamination is typically localized and associated with a specific facility, for example ... an airfield at which [PFOA/PFOS] were used for firefighting.”¹³

THE PLAINTIFFS’ WATER SUPPLY

¹¹ U.S. Department of Health and Human Services, 2021 Toxicological Profile for Perfluoroalkyls Released, (last visited Sep. 23, 2023) at: <https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf>

¹² ATSDR, *What are the Health Effects of PFAS?*, Agency for Toxic Substances and Disease Registry, Toxicological Profile for Perfluoroalkyls ch. 1, at 3. (2021), <https://www.atsdr.cdc.gov/pfas/health-effects/index.html> [<https://perma.cc/PEY3-98XL>]. See also Jodi Green, *A Roadmap to Insurance Coverage for the Mother of Toxic Torts: PFAS*, JD SUPRA (Sept. 9, 2022), <https://www.jdsupra.com/legalnews/a-roadmap-to-insurance-coverage-for-the-9877551/> [<https://perma.cc/959L-CX49>]

¹³ See “Fact Sheet PFOA & PFOS Drinking Water Health Advisories,” EPA Document Number: 800-F-16-003, available at https://www.epa.gov/sites/default/files/2016-06/documents/drinkingwaterhealthadvisories_pfoa_pfos_updated_5.31.16.pdf

170. On information and belief, various formulations of fire-extinguishing materials, which include AFFF, were used as part of fire trainings and other activities conducted at Wurtsmith from the 1950's until 1993 when the base was decommissioned. Due to the use of AFFF, fluorochemical-laden wastewater entered the groundwater without treatment.¹⁴ Scientists have concluded that the fluorochemicals present in the AFFF used at Wurtsmith persisted in the environment and water because they are resistant to degradation under the prevailing groundwater conditions in the general vicinity of the Air Force base.¹⁵

171. In 1977, the Wurtsmith officials and US Geological Survey (USGS) team learned that fire-fighting chemicals spilled at the Wurtsmith Air Force Base and migrated to drinking water wells, contaminating the water supply at the Base.¹⁶

172. On or around the year 1982, the natural surface and underground waterflow from and around the Base drew contaminant to the Au Sable river on its way to Lake Huron. In that same year, Horseshoe plume began disposal of

¹⁴ See Moody, Cheryl A., et al. "Occurrence and persistence of perfluorooctanesulfonate and other perfluorinated surfactants in groundwater at a fire-training area at Wurtsmith Air Force Base, Michigan, USA." *Journal of Environmental Monitoring* 5.2 (2003): 341-345.

¹⁵ United States Geological Survey (USGS), Ground-Water Contamination at Wurtsmith Air Base, Michigan, Jan. 2003, <https://www.usgs.gov/publications/ground-water-contamination-wurtsmith-air-force-base-michigan> (last visited Nov. 20, 2023).

¹⁶ *Id.*

AFFF off the east taxiways near the fire department, with a peak PFAS concentration of 43,000 ppt.

173. In 1985, the Base officials dug three additional wells to supply all the base water via the water tower that was in the path of the Horseshoe plume that flowed naturally underground toward Van Etten Lake tower drilled in the path of the Horseshoe plume, which flowed naturally underground toward Van Etten Lake.

174. Between 1997-98, the Base's main water source switched over to the Huron Regional Municipal water system and the WAFB sewer treatment plant closed.¹⁷

175. In 1991 film-forming foam chemicals were discharged at the Wurtsmith Air Force Base during an initial system testing of a hanger (5063) fire suppression system. Those chemicals seeped through the ground's natural and underground waterflow, carrying PFAS downstream and contaminating Clark's Marsh, Au Sable River and Lake Huron, all of which form the primary source of Plaintiffs' drinking water supply. A sampling of fish tissue from Clark's Marsh in 2012 showed PFOS concentrations ranging from 334 to 9580 ppb in

¹⁷ *Id.*

pumpkinseed, bluegill, yellow perch, and largemouth bass.¹⁸ The State of Michigan also has a “Do No Eat” Advisory on some animals in the State, including fish and deer.¹⁹

176. Plaintiffs lived and worked on Wurtsmith Air Force Base and ingested PFAS-contaminated water at or near the military installation, as wells transported the PFAS-laden portable water to all sources of drinking water supplies on and off the Base(s).

177. Film-forming foam chemical contamination has been found on Wurtsmith and other surrounding areas, including Loud Drive, Whispering Pines, and Van Etten Lake.

178. The State of Michigan has noted that pollution at these sites is “directly attributable” to Wurtsmith Air Force Base.²⁰

¹⁸ See Mich. Dep’t of Cmty. Health, PFOS - Fish Sampling Results, at 2 (last updated Apr. 2015), https://www.michigan.gov/documents/mdch/fish_data_handout_449030_7.pdf (last visited, Oct. 25, 2023).

¹⁹ Mich. Dep’t of Health & Human Servs. (MDHHS), PFAS levels in Michigan Deer from the Oscoda Area, Iosco County, <https://www.michigan.gov/pfasresponse/-/media/Project/Websites/PFAS-Response/Reports/Report-2021-PFAS-Deer-Oscoda-Area.pdf?rev=a9cfe413572b413687e4ab4d44ee0caf&hash=4CD81B5FCC4A6590188784D9283D5915>.

²⁰ Michigan PFAS Action Response Team, Gov. Whitmer Celebrates PFAS Clean Up at Wurtsmith Base After Yearslong Effort to Fight Contamination, Aug. 2023 <https://www.michigan.gov/pfasresponse/about/news/2023/08/17/gov-whitmer-celebrates-pfas-clean-up-at-wurtsmith-base> (last visited, Nov. 20, 2023).

179. The level of PFOS in fire-fighting foam is exceedingly concerning, reaching 165,000 ppt in 2017, or thousands of times higher than the EPA’s recommended safe level.²¹ A private well across from Oscoda High School on East River Road—south of the Au Sable River and about a mile and a half south of the Air Base—has more than the 70 parts-per-trillion (ppt) advisory level established for perfluorooctanoic acid (“PFOA”) and perfluorooctyl sulfonate (“PFOS”) by the Environmental Protection Agency.²² Similarly, the groundwater under the school itself has PFAS contamination level of about 1,000 parts per trillion—well over ten times the EPA’s maximum safe limit.²³ The highest PFAS concentrations found to date are south of the base in Clark’s Marsh, a wetland area where fish have the highest levels of PFOS ever recorded anywhere.

180. Built in 1941, Lackland Air Force Base is located in Bexar County, Texas. Lackland Air Force Base is part of Joint Base San Antonio, an amalgamation

²¹ Department of Health and Human Services, Lansing, Michigan, 2017, Van Etten Lake Surface Water and Foam LHC, <https://www.michigan.gov/pfasresponse/-/media/Project/Websites/PFAS-Response/Investigations/Iosco-County/Wurtsmith/Letter-2019-05-21-MDHHS-DHD2.pdf?rev=6ec327c2fa434e5691a2868dcae52174&hash=313FA5F1B8C9E9CA9A206ECAD8C63020> (last visited, Nov. 20, 2023).

²² Garret Ellison, *Oscoda PFAS plumes force new school water supply*, Michigan Live (Aug. 16, 2018), https://www.mlive.com/news/2018/08/oscodas_schools_pfas.html.

²³ Garret Ellison, *Wurtsmith toxic chemical plumes expand south of Au Sable River*, Michigan Live (Apr. 24, 2017), https://www.mlive.com/news/2017/04/wurtsmith_pfas_pfc_april_45_me.html

of Fort Sam Houston, Randolph Air Force Base and Lackland Air Force Base, which were merged on October 1, 2010. PFAS-containing AFFF foam was used on base, persisted in the environment, and contaminated the groundwater. Independent water testing has found PFAS levels at the Base above EPAs Health Advisory level.

181. George Air Force Base was decommissioned in 1992 as part of the base Realignment and Closure. The George Air Force Base received classification as a Superfund site—an area with a high concentration of toxic chemicals that the federal government has directed funds towards cleaning up. According to the Air Force, firefighting foam was no longer being disposed of by the late 1970's.²⁴ However, in 2016, the Air Force tested groundwater wells on George Air Force Base and found that all wells that were tested had levels of PFAS—and at least one well (located on 18399 Shay Road) exceeded 5,000 parts per trillion of PFAS.²⁵ Therefore, more than 35 years later, the hazardous levels of PFAS had not depleted from the groundwater.

182. At George Air Force Base, the Air Force disposed of firefighting foam at the landfill (Landfill-1). This landfill was positioned upstream from five drinking water supply wells, meaning that groundwater from this area would flow towards

²⁴ Ella Meyer, et al., Pitzer College, Adelanto Community Water Report (2022) at 9, accessed online at https://www.pitzer.edu/cec/wp-content/uploads/sites/54/2023/02/Adelanto_Community_Water_Report_2022-1.pdf

²⁵ *See id.*

the wells.²⁶ As a result, the drinking water on George Air Force Base was contaminated with PFAS chemicals in excess of the U.S. EPA's health advisory limits.

183. Minot Air Force Base was established in 1957 in Ward County, North Dakota. It became a major air base in the early 1960's and the Department of Defense used AFFF firefighting foams containing PFAS for training exercises and to extinguish fires. These fluorochemicals entered with the groundwater and persisted in the environment in the vicinity of the Air Force Base. Testing has revealed alarming levels of PFAS chemicals on base, with one sample yielding a detection of 453,000 ppt total PFAS.²⁷

184. Travis Air Force Base is a 6,368-acre site located in Fairfield, California. The Air Force initiated an investigation on the base for the presence of PFAS in 2015 and found results above the EPA's drinking water health advisory. Off-base drinking water tested for PFOS and PFOA yielded detections as high as

²⁶ *See id.*

²⁷ Final Site inspection for aqueous film forming foam areas at Minot Air Force Base Ward County, North Dakota, Contract No.: W9128F-15-D-0051 (January 2019), accessed online at <https://ar.afcec-cloud.af.mil/ViewPdf?id=604152&token=t%2Bv52Lrjl188%2FDRIJ3toK%2F6UShfDumuu2QSz5q%2FLfz8%3D>.

830 ppt.²⁸ Groundwater testing for of the same yielded detection as high as 713,000 ppt.²⁹

185. Established in 1917 as Chanute Field, Chanute Air Force Base was an Air Force training facility located in the east-central Illinois Village of Rantoul. The Base began as a pilot training school during world War I, and after a brief closure, reopened as a technical training center. Fire protection training was relocated to Chanute in 1964 and continued until the base's closure in 1993.

186. Testing for PFOS and PFOA was performed on Chanute Air Force Base in 2014. The groundwater testing done on Chanute yielded detections of PFOS as high as 1,960,000 ppt and PFOA as high as 151,000 ppt.³⁰

187. Plaintiffs were also stationed at various other Air Force Bases and military installations as referenced individually above. The United States Air Force started using AFFF foam in the early 1970's. Therefore, upon information and belief, Plaintiffs and other military and civilians, and their families living and working on Selfridge Air National Guard Base, Mather Air Force Base, Griffiss Air Force

²⁸ <https://www.acq.osd.mil/eie/ee/ecc/pfas/docs/data/fs/california/Travis-AFB.pdf>; *See also* Final Site Inspection for Aqueous Film Forming Foam Areas at Travis Air Force Base, Contract No.: W912BV-15-C-0082 (July 2018)

²⁹ *Id.*

³⁰ *See* Final Site Inspection Report for Aqueous Film Forming Foam (AFFF) Areas at Former Chanute Air Force Base, Illinois (December 2018), accessed at <https://ar.afcec-cloud.af.mil/ViewPdf?id=603728&token=FR0%2F2Zb39ebE7Z%2FG4HleG02S23OqFtQw7zKz3JoB5oc%3D>

Base, Westover Air Reserve Base, former Loring Air Force Base, Moody Air Force Base, Nellis Air Force Base, Keesler Air Force Base, Robins Air Force Base, Dyess Air Force Base, former Lowry Air Force Base, Kelly Field Base, Kirtland Air Force Base, March Air Reserve Base, Columbus Air Force Base, Goodfellow Air Force Base, Sheppard Air Force Base, Randolph Air Force Base, the United States Air Force Academy, K.I. Sawyer Air Force Base, Grand Forks Air Force Base, Barksdale Air Force Base, Travis Air Force Base, Offutt Air Force Base, Minot Air Force Base, McGuire-Dix-Lakehurst Joint Base, Edwards Air Force Base, Shaw Air Force Base, Bergstrom Air Force Base, Seymour Johnson Air Force Base, Davis-Monthan Air Force Base, and F.E. Warren Air Force Base ingested PFAS contaminated water at or near the military installations, as wells transported the PFAS-laden portable water to all sources of drinking water supplies on and off the Bases.

188. Contamination from PFOA and/or PFOS presents a threat to public health and the environment.³¹

³¹ According to EPA, Exposure to PFOA and PFOS Over Certain Levels May Have Effects On Fetal Development, The Immune System, and the Thyroid Gland, as Well as Cause Liver Damage And Cancer. *See* GAO, *Man-Made Chemicals and Potential Health Risks: EPA Has Completed Some Regulatory-Related Actions for PFAS*, GAO-21-37 (Washington, D.C.: Jan. 27, 2021).

189. Releases of PFAS into the land, air, and water from industrial sites are known pathways to the environment for PFOA and PFOS.

190. Due to their widespread use in consumer and commercial products, PFAS may also enter the environment from wastewater treatment facilities after the products containing them have been disposed of in landfills, during the use of the products, or in other manners.

191. Upon information and belief, the United States Air Force has stored and used Defendants' AFFF containing PFOA and/or PFOS chemicals in fire training and response exercises at its military installations and facilities.

192. As a result of their chemical exposures, Plaintiffs have been directly harmed by PFAS contamination and have thereby suffered damages in an amount to be established at trial.

**DEFENDANTS' KNOWLEDGE OF THE THREAT OF PFAS AND
ITS MANUFACTURING AND DISTRIBUTION OF PFAS AND PFAS-
CONTAINING AFFF**

193. Defendants have been manufacturing and/or using PFAS chemicals since the 1940s and continued to do so undeterred even after becoming aware of the harmful effects of these chemicals to humans and the environment.

194. For most of the past seven decades through the early 2000s, 3M was the primary manufacturer of PFAS in the United States.

195. 3M went on to market and promoted PFAS, and shipped PFAS to manufacturers, including Old DuPont, throughout the United States, including Michigan. 3M made enormous profits from PFAS and products containing PFAS and shipped PFAS and products containing PFAS to the United States Air Force, including its Air Force Bases and military installations throughout the country for decades until announcing in 2000 that it would cease production of PFOA and PFOS.

**3M’S KNOWLEDGE AND FRAUDULENT COVER-UP OF THE
DANGERS OF PFAS**

196. In the 1950s, based on its own internal studies, 3M concluded that PFAS are “toxic.”

197. 3M knew as early as the mid-1950s that PFAS bioaccumulate in humans and animals.³²

198. By the early 1960s, 3M understood that some PFAS are highly persistent in the environment, meaning that they do not degrade.

199. 3M knew as early as 1960 that chemical waste from its PFAS manufacturing facilities that was dumped into landfills or spilled on natural surfaces would leach into groundwater and otherwise enter the environment. A 3M internal

³² See Exhibit 1009, Plaintiff’s Second Amended Exhibit List, *State of Minnesota v. 3M Co.*, Case. No. 27-cv-10-28862, Index #1057 (Minn. D. Ct. Feb. 14, 2018), available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1009.pdf>

memo from 1960 described the company's understanding that such wastes "[would] eventually reach the water table and pollute domestic wells."³³

200. As early as 1963, 3M was aware that its PFAS products were persistent in the environment and would not degrade after disposal.

201. 3M began monitoring the blood of its employees for PFAS, as early as 1976, because 3M was concerned about the health effects of PFAS. The studies revealed that some 3M personnel were exposed to fluorochemicals between 100 and 300 times the normal levels in their blood.

202. 3M documents from 1977 relating to these worker tests further confirm that PFAS bioaccumulate.

203. By at least 1970, 3M knew that its PFAS products were hazardous to marine life.

204. One study of 3M's PFAS around this time had to be abandoned to avoid severe local pollution of nearby surface waters.

205. In 1975, 3M found there was a "universal presence" of at least one form of PFAS in blood serum samples taken from across the United States.³⁴

³³ See Exhibit 1025 at 2, Plaintiff's Second Amended Exhibit List, *State of Minnesota v. 3M Co.*, Case. No. 27-cv-10-28862, Index #1057 (Minn. D. Ct. Feb. 14, 2018), available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1025.pdf>

³⁴ Technical Report Summary: re Absorption of FC 95 and FC 143 on Soil, Feb. 27, 1978, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1158.pdf>.

206. Because PFAS are not naturally occurring in any amount, anywhere on the planet, this finding unquestionably alerted 3M to the near inevitability that its products were a pathway for widespread public exposure to its toxic ingredient—a likelihood that 3M considered internally but did not share outside the company.

207. This finding also alerted 3M to the likelihood that this PFAS is mobile, persistent, bio-accumulative, and biomagnifying, as those characteristics would explain the ubiquitous presence of this PFAS from 3M’s products in human blood.

208. According to a deposition transcript in a lawsuit brought by the State of Minnesota against 3M [No. 27-cv-10-28862 (4th Judicial Dist. Ct. Hennepin Cty.)] (“Minn. Lawsuit”) for damages to the state’s natural resources from PFAS, 3M began monitoring the blood of its employees for PFAS as early as 1976, because the company was “concerned” about “health” effects of PFAS. 3M documents from 1977 relating to these worker tests further confirmed that PFAS bioaccumulate.

209. Other studies by 3M in 1978 showed that PFOA and PFOS are toxic to monkeys. Also in 1978, a group of scientists and doctors met to review the results of various studies as part of the Fluorochemicals in Blood program. At the meeting, Dr. Harold C. Hodge told 3M’s then medical director, Dr. F.A. Ubel, that employees’ physical examination results should be analyzed in the context of the general

population. Specifically, Dr. Hodge stated that “[t]here appears to be indications of liver change from the physical examination results.”³⁵

210. In the late 1970s, 3M studied the fate and transport characteristics of PFOS in the environment, including in surface water and biota.

211. A 1979 report drew a direct line between effluent from 3M’s Decatur, Alabama plant and PFAS bioaccumulating in fish tissue taken from the Tennessee River. 3M resisted calls from its own ecotoxicologists going back to 1979 to perform an ecological risk assessment on PFOS and similar chemicals.

212. 3M’s own ecotoxicologists continued raising concerns to 3M until at least 1999.

213. In 1983, 3M scientists opined that those concerns about PFAS give rise to legitimate questions about the persistence, accumulation potential, and ecotoxic of [PFAS] in the environment.³⁶

³⁵ 3M Interoffice Correspondence re: Meeting Minutes – Meeting with H.C. Hodge, June 7, 1979, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX2724.pdf>.

³⁶ Memorandum from R.G. Perkins to F.D. Griffith re: Summary of the Review of the FC-143 Two-Year Feeder Study Report to be presented at the January 7, 1988, meeting with DuPont, January 5, 1988, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1343.pdf>.

214. In 1984, 3M's internal analyses demonstrated that PFAS were likely bioaccumulating in 3M fluorochemical employees.³⁷

215. According to the Minnesota Attorney General, despite 3M's understanding of the risks associated with PFAS, 3M engaged in a campaign to distort scientific research concerning PFAS and to suppress research into the potential harms associated with PFAS.

216. According to a deposition transcript from the Minn. Lawsuit, 3M recognized that if the public and governmental regulators became aware of the risks associated with PFAS, 3M would be forced to halt its manufacturing of PFAS and PFAS-derived products which would result in the loss of hundreds of millions of dollars in annual revenue.³⁸

217. The potential loss of 3M's massive profits from PFAS drove 3M to engage in a campaign to influence the science relating to PFAS and, according to internal 3M documents to conduct scientific "research" that it could use to mount "[d]efensive [b]arriers to [l]itigation."

³⁷ Memorandum from D.E. Roach to P.F. Riehle re: Organic Fluorine Levels, Aug. 31, 1984, available at

<https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1313.pdf>.

³⁸ See Exhibits 2144 & 2204, Plaintiff's Second Amended Exhibit List, *State of Minnesota v. 3M Co.*, Case. No. 27-cv-10-28862, Index #1057 (Minn. D. Ct. Feb. 14, 2018), available at

<https://www.ag.state.mn.us/Office/Cases/3M/StatesExhibits.asp>.

218. A key priority of an internal 3M committee—referred to as the FC CoreTeam— was to “[c]ommand the science” concerning “exposure, analytical, fate, effects, human health and ecological” risks posed by PFAS and for 3M to provide “[s]elective funding of outside research through 3M ‘grant’ money.”

219. In exchange for providing grant money to friendly researchers, 3M obtained the right to review and edit draft scientific papers regarding PFAS and sought control over when and whether the results of scientific studies were published at all.

220. A significant aspect of 3M’s campaign to influence independent scientific research involved 3M’s relationship with Professor John Giesy. 3M provided millions of dollars in grants to Professor Giesy, who presented himself publicly as an independent expert but, as revealed in his deposition transcript in the Minn. Lawsuit, he privately characterized himself as part of the 3M “team.”

221. According to Professor Giesy’s deposition transcript in the Minn. Lawsuit, Professor Giesy worked on behalf of 3M to “buy favors” from scientists in the field for the purpose of entering a “quid pro quo” with the scientists.³⁹

222. According to emails produced by Professor Giesy in the Minn. Lawsuit, through his position as an editor of academic journals, Professor Giesy reviewed

³⁹*See Id.* at Exhibit 1740
<https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1740.pdf>.

“about half of the papers published in the area” of PFAS ecotoxicology and billed 3M for his time reviewing the articles and, in performing reviews of these articles, Professor Giesy stated that he was always careful to ensure that there was “no paper trail to 3M” and that his goal was to “keep ‘bad’ papers [regarding PFAS] out of the literature” because “in litigation situations” those articles “can be a large obstacle to refute.”⁴⁰

223. 3M’s own employees recognized that 3M was concealing known dangers relating to PFAS. For example, in a 1999 resignation letter, an employee stated, “I can no longer participate in the process that 3M has established for the management of [PFAS.] For me, it is unethical to be concerned with markets, legal defensibility, and image over environmental safety.”⁴¹

224. In response to pressure from the United States Environmental Protection Agency (“EPA”), 3M began to phase out production of PFOS and PFOA products in 2000.

225. On May 16, 2000, 3M issued a news release asserting that “our products are safe,” citing the company’s “principles of responsible environmental management” as the reason to cease production.⁴²

⁴⁰ *Id.*

⁴¹ *See id.* at Exhibit 1001, available at <https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1001.pdf>.

⁴² *See id.* at Exhibit 1690, available at <https://www.ag.state.mn.us/Office/Cases/3M/StatesExhibits.asp>

226. On the same day as 3M's phase-out announcement, an EPA press release stated: "3M data supplied to EPA indicated that these chemicals are very persistent in the environment, have a strong tendency to accumulate in human and animal tissues and could potentially pose a risk to human health and the environment over the long term."⁴³

227. In a memo explaining its decision, the EPA noted that PFOS was among certain chemicals that appear to be persistent, bio-accumulative and toxic.⁴⁴

228. 3M knew or should have known that through their intended and/or common use, products containing PFAS would very likely injure and/or threaten public health and the environment at the locations Plaintiffs were exposed.

**OLD DUPONT'S KNOWLEDGE AND FRAUDULENT COVER-UP OF
THE DANGERS OF PFAS AND MOUNTING LIABILITIES**

229. Beginning in the 1950s, Old DuPont manufactured, produced, or utilized PFOA and other PFAS at several facilities in the United States.

⁴³ EPA, EPA and 3M Announce Phase Out of PFOS, (May 16, 2000), https://www.epa.gov/archive/epapages/newsroom_archive/newsreleases/33aa946e6cb11f35852568e1005246b4.html.

⁴⁴ *Id.* Also, the California State Water Resources Control Board has concluded that, major sources of PFAS" include industrial sites, landfills, and wastewater treatment plants. It elaborates: "PFAS can get into drinking water when products containing them are used or spilled onto the ground or into lakes and rivers. Once in groundwater, PFAS are easily transported large distances and can contaminate drinking wells." *See* California Water Board, Per- and Polyfluoroalkyl Substances (PFAS) Background, <https://www.waterboards.ca.gov/pfas/background.html>.

230. Throughout this time, Old DuPont was aware that PFOA was toxic, harmful to animals and humans, bio-accumulative, and bio-persistent in the environment. Old DuPont also knew that it directly emitted and discharged, and continued to emit and discharge, PFOA in large quantities into the environment from its manufacturing plants, such that hundreds of thousands of people had been exposed to its PFOA, including through public and private drinking water supplies.

231. Old DuPont company scientists issued internal warnings about the toxins associated with their PFAS products as early as 1961.

232. Old DuPont's Toxicology Section Chief opined that such products should be "handled with extreme care," and that contact with the skin should be "strictly avoided."

233. In 1978, based on information it received from 3M about elevated and persistent organic fluorine levels in workers exposed to PFAS, Old DuPont initiated a plan to review and monitor the health conditions of potentially exposed workers to assess whether any negative health effects could be attributed to PFAS exposure.

234. This monitoring plan involved obtaining blood samples from the workers and analyzing them for the presence of organic fluorine.

235. By 1979, Old DuPont had data indicating that its workers exposed to PFOA had a significantly higher incidence of health issues than did unexposed workers.

236. Old DuPont did not report this data or the results of its worker health analysis to any government agency or community.

237. The following year, Old DuPont internally confirmed that PFOA “is toxic,” that humans bioaccumulate PFOA in their tissue, and that “continued exposure is not tolerable.”

238. Not only did Old DuPont know that PFOA bioaccumulates in humans, but it was also aware that PFOA could cross the placenta from an exposed mother to her gestational child.

239. In fact, Old DuPont had reported to EPA in March 1982 that results from a rat study showed PFOA crossing the placenta if present in maternal blood, but Old DuPont concealed the results of internal studies of its own plant workers confirming placental transfer of PFOA in humans.

240. While Old DuPont knew about this toxic danger as early as the 1960s, Old DuPont also was aware that PFAS could contaminate the surrounding environment and cause human exposure.

241. In 1981, Old Dupont tested for and found PFOA in the blood of female plant workers Parkersburg, West Virginia. DuPont observed and documented pregnancy outcomes in exposed workers, finding two of seven children born to

female plant workers between 1979 and 1981 had birth defects—one an “unconfirmed” eye and tear duct defect, and one a nostril and eye defects.⁴⁵

242. In 1981, Old DuPont also knew that PFOA could be emitted into the air from its facilities, and that those air emissions could travel beyond the facility boundaries and enter the environment and natural resources.

243. By 1984, Old DuPont unquestionably was aware that PFOA is biopersistent. Old DuPont was long aware that the PFOA it was releasing from its facilities was leaching into groundwater used for public drinking water.

244. After obtaining data on these releases and the resulting contamination near Old DuPont’s Washington Works plant in West Virginia in 1984, Old DuPont held a meeting at its corporate headquarters in Wilmington, Delaware, to discuss health and environmental issues related to PFOA (the “1984 Meeting”).

245. Old DuPont employees who attended the 1984 Meeting discussed available technologies that could control and reduce PFOA releases from its manufacturing facilities, as well as potential replacement materials.

246. Old DuPont chose not to use either available technologies or replacement materials, despite knowing of PFOA’s toxicity.

⁴⁵ DuPont, C-8 Blood Sampling Results, 1981. (xnpw0228). DuPont. C-8 blood sampling results; 1981. (xnpw0228).
<https://www.industrydocuments.ucsf.edu/docs/#id=xnpw0228>.

247. During the 1984 Meeting, Old DuPont employees in attendance spoke of the PFOA issue as “one of corporate image, and corporate liability.”⁴⁶

248. They were resigned to Old DuPont’s “incremental liability from this point on if we do nothing” because Old DuPont was “already liable for the past 32 years of operation.”⁴⁷

249. They also stated that the “legal and medical [departments within Old DuPont] will likely take the position of total elimination” of PFOA use in Old DuPont’s business, and that these departments had “no incentive to take any other position.”⁴⁸

250. By 2000, Old DuPont’s in-house counsel was particularly concerned about the threat of punitive damages resulting from Old DuPont’s releases of PFOA at its Washington Works facility in West Virginia.

251. Old DuPont’s own Epidemiology Review Board repeatedly raised concerns about Old DuPont’s statements to the public that there were no adverse health effects associated with human exposure to PFOA.

⁴⁶ Schmid, J.A., Personal & Confidential Memorandum, re: C-8 Meeting Summary (May 23, 1984), Wilmington, Del., available at https://static.ewg.org/files/dupont_elim_PFOA_1984.pdf (last accessed August 3, 2023) (hereinafter “The DuPont Memo”).

⁴⁷ *See id.*

⁴⁸ *See id.*

252. For example, in February 2006, the Epidemiology Review Board “strongly advise[d] against any public statements asserting that PFOA does not pose any risk to health” and questioned “the evidential basis of [Old DuPont’s] public expression asserting, with what appears to be great confidence, that PFOA does not pose a risk to health.”⁴⁹

253. In 2004, EPA filed an action against Old DuPont based on its failure to disclose toxic and exposure information for PFOA, in violation of federal environmental laws.

254. In 2005, Old DuPont eventually settled the action by agreeing to pay \$10.25 million in a civil administrative penalty and to complete \$6.25 million in supplemental environmental projects.

255. The combined settlement resolved eight counts brought by the EPA alleging violations of the Toxic Substances Control Act and the Resource Conservation and Recovery Act concerning the toxicity of PFAS compounds.

256. Old DuPont also promised to phase out the production and use of PFOA by 2015.

⁴⁹ Tom L. Beauchamp, et al., Memorandum to Michael Kaplan re: Epidemiology Review Board and PFOA (February 24, 2006), available at https://static.ewg.org/files/ERB_February2006.pdf (last accessed August 3, 2023).

257. EPA called the settlement the “largest civil administrative penalty EPA has ever obtained under any federal environmental statute.”⁵⁰

258. Old DuPont and Chemours knew or should have known that in their intended and/or common use products containing PFAS would very likely injure and/or threaten public health and the environment in Michigan.

259. Also, in 2005, a final court order was entered approving Old DuPont’s 2004 settlement in the class action lawsuit styled *Leach, et al. v. E. I. du Pont de Nemours & Co.*, Civil Action No. 01-C-608 (Wood Cty. W. Va. Cir. Ct.) (the “Leach Action”) filed on behalf of approximately 70,000 individuals with PFOA-contaminated drinking water supplies in Ohio and West Virginia for benefits valued at over \$300 million.

260. Under the terms of the final class action settlement, Old DuPont agreed to fund a panel of independent scientists (the “C8 Science Panel”) to conduct whatever studies were necessary to confirm which diseases were linked to class member PFOA exposure, to remove PFOA from the contaminated water sources, and to pay up to \$235 million for medical monitoring of class members with respect

⁵⁰ Dave Ryan, *EPA Settles PFOA Case Against DuPont for Largest Environmental Administrative Penalty in Agency History*, EPA Newsroom (Dec. 14, 2005), https://www.epa.gov/archive/epapages/newsroom_archive/newsreleases/fdcb2f665cac66bb852570d7005d6665.html

to any diseases linked by the C8 Science Panel to their PFOA exposure. “C-8,” a term used internally by DuPont employees, is an alternative name for PFOA.

261. After seven years of study and analyses, the C8 Science Panel confirmed that PFOA exposures among class members were linked to six serious human diseases, including two types of cancer.

262. On May 2, 2012, the EPA published its Third Unregulated Contaminant Monitoring Rule (“UCMR3”), requiring public water systems nationwide to monitor for thirty contaminants of concern between 2013 and 2015, including PFOS and PFOA.⁵¹

263. In the May 2015 “Madrid Statement on Poly- and Perfluoroalkyl Substances (PFAS’s),” scientists and other professionals from a variety of disciplines, concerned about the production and release into the environment of PFOA, called for greater regulation, restrictions, and limits on the manufacture and handling of any PFOA containing product, and to develop safe nonfluorinated alternatives to these products to avoid long-term harm to human health and the environment.⁵²

⁵¹ See Revisions to the Unregulated Contaminant Monitoring Regulation (UCMR 3) for Public Water Systems, 77 Fed. Reg. 26072 (May 2, 2012).

⁵² Blum A, Balan SA, Scheringer M, Trier X, Goldenman G, Cousins IT, Diamond M, Fletcher T, Higgins C, Lindeman AE, Peaslee G, de Voogt P, Wang Z, Weber R. 2015. The Madrid statement on poly and perfluoroalkyl substances (PFASs). *Environ Health Perspective* 123: A107–A111, available at <http://dx.doi.org/10.1289/ehp.1509934>.

264. On May 25, 2016, the EPA released a lifetime health advisory (“HA”) and health effects support documents for PFOS and PFOA.⁵³ The EPA developed the HA’s to assist governmental officials in protecting public health when PFOS and PFOA are present in drinking water. The EPA HA’s identified the concentration of PFOS and PFOA in drinking water at or below which adverse health effects are not anticipated to occur over a lifetime of exposure at 0.07 ppb or 70 ppt. The HA’s were based on peer-reviewed studies of the effects of PFOS and PFOA on laboratory animals (rats and mice) and were also informed by epidemiological studies of human populations exposed to PFOS.

265. In 2016, the National Toxicology Program of the United States Department of Health and Human Services (“NTP”) and the International Agency for Research on Cancer (“IARC”) both released extensive analyses of the expanding body of research regarding the adverse effects of PFCs. The NTP concluded that

⁵³ See Fed. Register, Vol. 81, No. 101, May 25, 2016, Lifetime Health Advisories and Health Effects Support Documents for Perfluorooctanoic Acid and Perfluorooctane Sulfonate. According to EPA, "...studies indicate that exposure to PFOA and PFOS over certain levels may result in... developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations), cancer (e.g., testicular, kidney), liver effects (e.g., tissue damage), immune effects (e.g., antibody production and immunity), thyroid effects and other effects (e.g., cholesterol changes)."; see also EPA, Fact Sheet PFOA & PFOS Drinking Water Health Advisories, EPA Document Number 800-F-16-003, available at https://www.epa.gov/sites/default/files/2016-06/documents/drinkingwaterhealthadvisories_pfoa_pfes_updated_5.31.16.pdf (last visited, May 8, 2023).

both PFOA and PFOS are “presumed to be an immune hazard to humans” based on a “consistent pattern of findings” of adverse immune effects in human (epidemiology) studies and “high confidence” that PFOA and PFOS exposure was associated with suppression of immune responses in animal (toxicology) studies.⁵⁴

266. Old DuPont required that Chemours both directly assume its historical PFAS liabilities and indemnify Old DuPont from those liabilities. Chemours explained in its November 2016 SEC filing: “[s]ignificant unfavorable outcomes in a number of cases in the [C8] MDL could have a material adverse effect on Chemours’ consolidated financial position, results of operations or liquidity.”⁵⁵

267. On February 13, 2017, Old DuPont and Chemours agreed to pay \$670.7 million to resolve the approximately 3,500 then-pending cases in the C8.

**OLD DUPONT’S MULTI-STEP, FRAUDULENT SCHEME TO ISOLATE
ITS VALUABLE TANGIBLE ASSETS FROM PFAS LIABILITIES AND
HINDER CREDITORS**

⁵⁴ See U.S. Dep’t of Health and Human Services, Nat’l Toxicology Program, NTP Monograph: Immunotoxicity Associated with Exposure to Perfluorooctanoic Acid or Perfluorooctane Sulfonate (Sept. 2016), at 1, 17, 19, available at https://ntp.niehs.nih.gov/ntp/ohat/pfoa_pfos/pfoa_pfosmonograph_508.pdf Filed: New York County Clerk 03/13/2023 04:41 PM INDEX NO. 152370/2023 NYSCEF DOC. NO. 2 NYSC (last visited, Oct. 25, 2023).

⁵⁵ See The Chemours Company, Form 10-K 2016 at 16, available at <https://d1lge852tjjqow.cloudfront.net/CIK-0001627223/fe11bcb1-b84c-46e4-9c3a-54bef7943338.pdf>

268. By 2013, Old DuPont knew that it faced substantial environmental and other liabilities arising from its use of PFOA at Washington Works alone, as well as liability related to PFAS contamination at other sites and areas throughout the country, and its sale of products containing PFAS, and that its liability was likely billions of dollars.

269. These liabilities include clean-up costs, remediation obligations, tort damages, natural resource damages and, most importantly, likely massive and potentially crippling punitive damages arising from Old DuPont's intentional misconduct.

270. Considering this significant exposure, upon information and belief, by 2013 Old DuPont's management began to consider restructuring the company to, among other things, avoid responsibility for the widespread environmental harm and personal injuries that Old DuPont's PFAS and associated conduct caused, and to shield billions of dollars in assets from these substantial liabilities. Old DuPont referred to this initiative internally as "Project Beta."

271. Upon information and belief, Old DuPont contemplated various restructuring opportunities, including potential merger structures. In or about 2013, Old DuPont and The Chemical Company ("Old Dow") began discussions about a possible "merger of equals."

272. Upon information and belief, Old DuPont recognized that neither Old Dow, nor any other rational merger partner, would agree to a transaction that would result in exposing Old Dow, or any other merger partner, to the substantial PFAS liabilities that Old DuPont faced.

273. Accordingly, Old DuPont's management decided to pursue a corporate restructuring strategy specifically designed to isolate Old DuPont's massive legacy liabilities from its valuable tangible assets to shield those assets from creditors and entice Old Dow to pursue the proposed merger.

274. Old DuPont engaged in a three-part restructuring plan, further explained below.

275. The first step in Old DuPont's plan was to transfer its Performance Chemicals business (which included Teflon® and other products, the manufacture of which involved the use of PFOA and other PFAS) into its wholly owned subsidiary, Chemours. And then, in July 2015, Old DuPont "spun off" Chemours as a separate publicly traded entity and saddled Chemours with Old DuPont's massive legacy liabilities (the "Chemours Spinoff").

276. Old DuPont knew that Chemours was undercapitalized and could not satisfy the massive liabilities that it caused Chemours to assume. Old DuPont also knew that the Chemours Spinoff alone would not isolate its own assets from its PFAS liabilities, and that Old DuPont still faced direct liability for its own conduct.

277. Accordingly, Old DuPont moved on to the next step of its plan, designed to further distance itself from the exposure it had created over its decades of illicit conduct regarding PFAS.

278. The second step involved Old DuPont and Old Dow entering an “Agreement and Plan of Merger” in December 2015, pursuant to which Old DuPont and Old Dow with subsidiaries of a newly formed holding company, DowDuPont, Inc. (“DowDuPont”), which was created for the sole purpose of effectuating the merger. Old DuPont and Old Dow became subsidiaries of DowDuPont.

279. Then, through a series of subsequent agreements, DowDuPont engaged in numerous business segment and product line “realignments” and “divestitures.”

280. The net effect of these transactions was to transfer, either directly or indirectly, a substantial portion of Old DuPont’s assets to DowDuPont.

281. The third step involved DowDuPont spinning off two, new, publicly traded companies: (i) Corteva, which currently holds Old DuPont as a subsidiary, and (ii) Dow, Inc. (“New Dow”) which currently holds Old Dow as a subsidiary. DowDuPont was then renamed New DuPont.

282. As a result of these transactions, between December 2014 (pre-Chemours Spinoff) and December 2019 (post-Dow merger), the value of Old DuPont’s tangible assets decreased by \$20.85 billion.

283. New DuPont and New Dow now hold the vast majority of the tangible assets that Old DuPont formerly owned.

THE CHEMOURS SPINOFF

284. In February 2014, Old DuPont formed Chemours as a wholly-owned subsidiary. Chemours was originally incorporated on February 18, 2014, under the name “Performance Operations, LLC.”

285. On or about April 15, 2014, the company was renamed “The Chemours Company, LLC,” and on April 30, 2015, it was converted from a limited liability company to a corporation named “The Chemours Company.”

286. Prior to July 1, 2015, Chemours was a wholly-owned subsidiary of Old DuPont. On July 1, 2015, Old DuPont completed the spinoff of its Performance Chemicals Business, consisting of Old DuPont’s Titanium Technologies, Chemical Solutions, and fluorochemical products segments, and Chemours became a separate, publicly traded entity.

287. The Performance Chemicals Business included fluorochemical products and the business segment that had manufactured, used, and discharged PFOA into the environment.

288. Prior to the Chemours Spinoff, Chemours was a wholly owned subsidiary of Old DuPont, and its Board of Directors had three members, all of whom were Old DuPont employees.

289. On June 19, 2015, a fourth member of the Board was appointed, and upon information and belief, this fourth member had served as a member of Old DuPont's Board of Directors from 1998 to 2015.

290. On July 1, 2015, effective immediately prior to the Chemours Spinoff, the size of the Chemours Board of Directors was expanded to eight members. The three initial Old DuPont employees resigned from the Board, and to fill the vacancies created thereby, seven new members were appointed.

291. To effectuate the Chemours Spinoff, Old DuPont and Chemours entered into the June 26, 2015, Separation Agreement (the "Chemours Separation Agreement").

292. Pursuant to the Chemours Separation Agreement, Old DuPont agreed to transfer to Chemours all businesses and assets related to the Performance Chemicals Business, including approximately 37 active chemical plants.

293. Old DuPont completed a significant internal reorganization prior to the Chemours Spinoff, such that all the assets that Old DuPont deemed to be part of the Performance Chemicals Business would be transferred to Chemours.

294. At the same time, Chemours accepted a broad assumption of liabilities for Old DuPont's historical use, manufacture, and discharge of PFAS, although the specific details regarding the nature, probable maximum loss value, and anticipated timing of the liabilities that Chemours assumed are not publicly available.

295. Notwithstanding the billions of dollars in PFAS liabilities that Chemours would face, on July 1, 2015, Chemours transferred to Old DuPont approximately \$3.4 billion as a cash dividend, along with a “distribution in kind” of promissory notes with an aggregate principal amount of \$507 million.

296. Thus, in total, Chemours distributed \$3.9 billion to Old DuPont. Chemours funded these distributions by entering approximately \$3.995 billion of financing transactions, including senior secured term loans and senior unsecured notes, on May 12, 2015. Also, Chemours distributed approximately \$3.0 billion in common stock to Old DuPont shareholders on July 1, 2015 (181 million shares at \$16.51 per share price).

297. Accordingly, most of the valuable assets that Chemours may have had at the time of the Chemours Spinoff were unavailable to creditors with current or future PFAS claims, and Old DuPont stripped Chemours’s value for itself and its shareholders. In total, Chemours transferred almost \$7 billion in stock, cash, and notes to Old DuPont and its shareholders. Old DuPont, however, only transferred \$4.1 billion in net assets to Chemours. Chemours assumed billions of dollars of Old DuPont’s PFAS and other liabilities.

298. In addition to the assumption of such liabilities, the Chemours Separation Agreement required Chemours to provide broad indemnification to Old

DuPont in connection with these liabilities, which is uncapped and does not have a survival period.

299. The Chemours Separation Agreement requires Chemours to indemnify Old DuPont against, and assume for itself, all “Chemours Liabilities,” which is defined broadly to include, among other things, “any and all Liabilities relating . . . primarily to, arising primarily out of or resulting primarily from, the operation or conduct of the Chemours Business, as conducted at any time prior to, at or after the Effective Date . . . including . . . any and all Chemours Assumed Environmental Liabilities . . . ,” which includes Old DuPont’s historic liabilities relating to and arising from its decades of emitting PFOA into the environment.

300. The Chemours Separation Agreement also requires Chemours to indemnify Old DuPont against, and assume for itself, the Chemours Liabilities regardless of (i) when or where such liabilities arose; (ii) whether the facts upon which they are based occurred prior to, on, or subsequent to the effective date of the spinoff; (iii) where or against whom such liabilities are asserted or determined; (iv) whether arising from or alleged to arise from negligence, gross negligence, recklessness, violation of law, fraud or misrepresentation by any member of the Old DuPont group or the Chemours group; (v) the accuracy of the maximum probable loss values assigned to such liabilities; and (vi) which entity is named in any action associated with any liability.

301. The Chemours Separation Agreement also required Chemours to indemnify Old DuPont from, and assume all, environmental liabilities that arose prior to the spinoff if they were “primarily associated” with the Performance Chemicals Business.

302. Chemours also agreed to use its best efforts to be fully substituted for Old DuPont concerning any order, decree, judgment, agreement, or action for Old DuPont’s environmental liabilities.

303. Notably, Chemours sued Old DuPont in Delaware state court in 2019, alleging, among other things, that if (i) the full value of Old DuPont’s PFAS liabilities were properly estimated and (ii) the Court does not limit Chemours’ liability that the Chemours Separation Agreement imposes, then Chemours would have been insolvent at the time of the Chemours Spinoff.

304. There was no meaningful, arms-length negotiation of the Separation Agreement.

305. In its Delaware lawsuit, Chemours alleges that Old DuPont refused to allow any procedural protections for Chemours in the negotiations, and Old DuPont and its outside counsel prepared all the documents to effectuate the Chemours Spinoff. Indeed, during the period in which the terms of commercial agreements between Chemours and Old DuPont were negotiated, Chemours did not have an independent board of directors or management independent of Old DuPont.

306. Although Chemours had a separate board of directors, Old DuPont employees controlled the Chemours board. Indeed, when the Chemours Separation Agreement was signed, Chemours was a wholly owned subsidiary of Old DuPont, and the Chemours board consisted of three Old DuPont employees and one former, long-standing member of the Old DuPont board.

307. Chemours' independent board of directors, newly appointed on July 1, 2015, immediately prior to the Chemours Spinoff, did not participate in the negotiations of the terms of the separation.

308. It is apparent that Old DuPont's goal with respect to the Chemours Spinoff was to segregate a large portion of Old DuPont's legacy environmental liabilities, including liabilities related to its PFAS chemicals and products, and in so doing, shield Old DuPont's assets from any financial exposure associated therewith.

309. Not surprisingly, given Old DuPont's extraction of nearly \$4 billion from Chemours immediately prior to the Chemours Spinoff, Chemours was thinly capitalized and unable to satisfy the substantial liabilities that it assumed from Old DuPont. Indeed, Chemours disclosed in public SEC filings that its "significant indebtedness" arising from its separation from Old DuPont restricted its current and future operations.

310. At the end of December 2014, Chemours reported it had total assets of \$5.959 billion and total liabilities of \$2.286 billion. At the end of 2015, following

the Chemours Spinoff, Chemours reported that it had total assets of \$6.298 billion and total liabilities of \$6.168 billion as of December 31, 2015, yielding a total net worth of \$130 million.

311. Removing Chemours' goodwill and other intangibles of \$176 million yields a tangible net worth of negative \$46 million (that is, Chemours' liabilities were greater than its tangible assets). According to unaudited pro forma financial statements, as of March 31, 2015 (but giving effect to all of the transactions contemplated in the Chemours Spinoff), Chemours had total assets of \$6.4 billion and total liabilities of \$6.3 billion.

312. Chemours also reported that these liabilities included \$454 million in "other accrued liabilities," which in turn included \$11 million for accrued litigation and \$68 million for environmental remediation. Chemours also had \$553 million in "other liabilities," which included \$223 million for environmental remediation and \$58 million for accrued litigation.

313. Chemours significantly underestimated its liabilities, including the liabilities that it had assumed from Old DuPont with respect to PFAS, and which Old DuPont and Chemours knew or should have known would be tens of billions of dollars.

314. Had Chemours taken the full extent of Old DuPont's legacy liabilities into account, as it should have done, it would have had negative equity (that is, total

liabilities that are greater than total assets), not only on a tangible basis, but also on a total equity basis, and, Chemours would have been rendered insolvent at the time of the Chemours Spinoff.

STEP 2: THE OLD DOW/OLD DUPONT “MERGER”

315. After the Chemours Spinoff, Old DuPont took the untenable position that it was not responsible for the widespread PFAS contamination that it had caused over several decades. Old DuPont publicly claimed that the PFAS liabilities associated with the Performance Chemicals business that Old DuPont had transferred to Chemours rested solely with Chemours, not with Old DuPont.

316. However, Old DuPont could not contractually discharge all its historical liabilities through the Chemours Spinoff, and Old DuPont remained liable for the liabilities it had caused, and that Chemours had assumed.

317. Old DuPont knew that it could not escape liability and would still face exposure for PFAS liabilities, including potentially massive punitive damages. So Old DuPont moved to the next phase of its scheme. On December 11, 2015, less than six months following the Chemours Spinoff, Old DuPont and Old Dow announced that their respective boards had approved an agreement “under which the companies [would] combine in an all-stock merger of equals” and that the combined company would be named DowDuPont, Inc. (“Dow-DuPont Merger”). The companies disclosed that they intended to subsequently separate the combined companies’

businesses into three publicly traded companies through further spinoffs, each of which would occur 18 to 24 months following the closing of the merger.

318. To effectuate the transaction, Old DuPont and Old Dow entered into an Agreement and Plan of Merger (the “Dow-DuPont Merger Agreement”) that provided for (i) the formation of a new holding company – Diamond-Orion HoldCo, Inc., later named DowDuPont, and then renamed DuPont de Nemours, Inc., (i.e., New DuPont) and (ii) the creation of two new merger subsidiaries into which Old Dow and Old DuPont each would merge.

319. Upon the closing of the DowDuPont Merger, Old Dow merged into one merger subsidiary, and Old DuPont merged into the other merger subsidiary. Thus, because of the merger, and in accordance with the DowDuPont Merger Agreement, Old Dow and Old DuPont each became wholly owned subsidiaries of DowDuPont.

320. Although Old DuPont and Old Dow referred to the transaction as a “merger of equals,” the two companies did not actually merge at all, because doing so would have infected Old Dow with all Old DuPont’s historical PFAS liabilities. Rather, Old DuPont and Old Dow became affiliated sister companies that were each owned by the newly formed DowDuPont (i.e., New DuPont).

**STEP 3: THE SHUFFLING, REORGANIZATION, AND FRAUDULENT
TRANSFER OF ASSETS AWAY FROM OLD DUPONT AND SEPARATION
OF CORTEVA AND NEW DOW**

321. Following the Dow-DuPont Merger, DowDuPont (i.e., New DuPont) underwent a significant internal re-organization and engaged in numerous business segment and product line “realignments” and “divestitures.” The net effect of these transactions has been the transfer, either directly or indirectly, of a substantial portion of Old DuPont’s assets out of the company.

322. While, again, the details of these transactions remain hidden from Plaintiffs and other creditors, it is apparent that the transactions were intended to frustrate and hinder creditors with claims against Old DuPont, including with respect to its substantial PFAS liabilities. The significant internal reorganization instituted by DowDuPont (i.e., New DuPont) was in preparation for the conglomerate being split into three, separate, publicly traded companies.

323. Old DuPont’s assets, including its remaining business segments and product lines, were transferred either directly or indirectly to DowDuPont (i.e., New DuPont), which reshuffled the assets and combined them with the assets of Old Dow, and then reorganized the combined assets into three distinct divisions: (i) the “Agriculture Business”; (ii) the “Specialty Products Business”; and (iii) the “Material Sciences Business.”

324. While the precise composition of these divisions, including many details of the specific transactions, the transfer of business segments, and the divestiture of product lines during this time, are not publicly available, it is apparent

that Old DuPont transferred a substantial portion of its valuable assets to DowDuPont (i.e., New DuPont), for far less than the assets were worth.

325. Once the assets of Old DuPont and Old Dow were combined and reorganized, DowDuPont (i.e., New DuPont) incorporated two new companies to hold two of the three newly formed business lines: (i) Corteva, which became the parent holding company of Old DuPont, which in turn holds the Agriculture Business; and (ii) New Dow, which became the parent holding company of Old Dow, and which holds the Materials Science Business. DowDuPont (i.e., New DuPont) retained the specialty products business, and prepared to spin off Corteva and New Dow into separate, publicly traded companies.

326. The mechanics of the separations are governed by the April 1, 2019, Separation and Distribution Agreement among Corteva, New Dow, and DowDuPont (i.e., New DuPont) (the “DowDuPont Separation Agreement”). The Dow DuPont Separation Agreement generally allocates the assets primarily related to the respective business divisions to Corteva (Agriculture Business), New Dow (Materials Science Business) and New DuPont (Specialty Products Business), respectively. New DuPont also retained several “non-core” business segments and product lines that once belonged to Old DuPont.

327. Similarly, Corteva, New Dow, and New DuPont each retained the liabilities primarily related to the business divisions that they retained, i.e., (i)

Corteva retained and assumed the liabilities related to the Agriculture Business; (ii) New DuPont retained and assumed the liabilities related to the Specialty Products Business; and (iii) New Dow retained and assumed the liabilities related to the Materials Science Business.

328. Corteva and New DuPont also assumed direct financial liability of Old DuPont that was not related to the Agriculture, Material Science or Specialty Products Businesses, including, upon information and belief, the PFAS liabilities. These assumed PFAS liabilities are allocated on a pro-rata basis between Corteva and New DuPont pursuant to the DowDuPont Separation Agreement, such that, after both companies have satisfied certain conditions, future liabilities are allocated 71% to New DuPont and 29% to Corteva.

329. The separation of New Dow was completed on or about April 1, 2019, when DowDuPont (i.e., New DuPont) distributed all New Dow's common stock to DowDuPont stockholders as a pro rata dividend. New Dow now trades on the New York Stock Exchange ("NYSE") under Old Dow's stock ticker, "DOW."

330. On or about May 2, 2019, DowDuPont (i.e., New DuPont) consolidated the Agricultural Business line into Old DuPont, and then, on or about May 31, 2019, it "contributed" Old DuPont to Corteva. The following day, on June 1, 2019, DowDuPont (i.e., New DuPont) spun off Corteva as an independent public company.

331. Corteva now holds 100% of the outstanding common stock of Old DuPont. Corteva now also trades on the NYSE under the stock ticker “CTVA.”

332. The separation of Corteva was completed on or about June 1, 2019, when DowDuPont distributed all Corteva’s common stock to DowDuPont (i.e., New DuPont) stockholders as a pro rata dividend.

333. The corporate structures of New Dow and Old Dow, and Corteva and Old DuPont, respectively, following the separations are depicted below with substantially fewer tangible assets than they had prior to the restructuring.

334. On or about June 1, 2019, Dow DuPont changed its registered name to Dupont de Nemours (meaning New Dupont).

335. The net outcome of these transactions was to strip Old Dupont of its substantial tangible assets and transfer them to the new Dupont and Corteva for far less than they were originally worth.

336. Old Dupont expected that the Dow-DuPont merger created ‘goodwill’ worth billions of dollars. When the Corteva separation was complete, a portion of this ‘goodwill’ was assigned to Old-DuPont Dow-DuPont to prop up its balance sheet. The Old DuPont was left with substantially fewer tangible assets than it had prior to the restructuring.

337. In addition, Old DuPont owes a debt to Corteva of approximately \$4 billion. Recent SEC filings demonstrate the substantial deterioration of Old

DuPont's finances and the drastic change in its financial condition before and after the above transactions.

338. For example, for the fiscal year ended 2014, prior to the Chemours Spinoff, Old DuPont reported \$3.6 billion in net income and \$3.7 billion in cash provided by operating activities. For the fiscal year ended 2019, just months after the Corteva separation, however, Old DuPont reported a net loss of negative \$1 billion and only \$996 million in cash provided by operating activities. That is a decrease of 128% in net income and a decrease of 73% in annual operating cash flow.

339. Additionally, Old DuPont reported a significant decrease in Income from Continuing Operations Before Income Taxes ("EBT"). Old DuPont reported \$4.9 billion in EBT for the period ending December 31, 2014. For the period ending December 31, 2019, Old DuPont reported EBT of negative \$422 million.

340. The value of Old DuPont's tangible assets further underscores Old DuPont's precarious financial situation. For the fiscal year ended 2014, prior to the Chemours Spinoff, Old DuPont owned nearly \$41 billion in tangible assets. For the fiscal year ended 2019, Old DuPont owned just under \$21 billion in tangible assets.

341. That means in the five-year period over which the restructuring occurred, when Old DuPont knew that it faced billions of dollars in PFAS liabilities,

Old DuPont transferred or divested approximately half of its tangible assets—totaling \$20 billion.

342. As of September 2019, just after the Corteva spinoff, Old DuPont reported \$43.251 billion in assets. But almost \$21.835 billion of these assets were comprised of assets, including “goodwill” from its successive restructuring activities.

343. At the same time, Old DuPont reported liabilities totaling \$22.060 billion. Thus, when the Corteva spinoff was complete, Old DuPont’s tangible net worth (excluding its intangible assets) was negative \$644 million.

344. Old DuPont’s financial condition has continued to deteriorate. By the end of fiscal year 2019, Old DuPont reported \$42.397 billion in total assets, half of which (or \$21.653 billion) are intangible assets. Old DuPont’s reported liabilities for the same period totaled \$21.869 billion.

345. Old DuPont’s tangible net worth between September 30, 2019, and December 31, 2019, declined even further, whereby Old DuPont ended fiscal year 2019 with a tangible net worth of negative \$1.125 billion.

346. New DuPont—to which 71% of PFAS liabilities are “allocated” under the DowDuPont Separation Agreement once certain conditions are satisfied—is in the process of divesting numerous business segments and product lines, including

tangible assets that it received from Old DuPont, and for which Old DuPont has received less than reasonably equivalent value.

347. Old DuPont's parent holding company, Corteva—to which 29% of PFAS liabilities are “allocated” under the DowDuPont Separation Agreement once certain conditions are satisfied—holds as its primary tangible asset the intercompany debt owed to it by its wholly owned subsidiary, Old DuPont. However Old DuPont does not have sufficient tangible assets to satisfy this debt obligation.

PLAINTIFFS ASSERT AGAINST THE DEFENDANTS AS FOLLOWS:

348. Throughout the duration of Plaintiffs' military service and/or residence on military installations, Plaintiffs ingested drinking water with Defendants' AFFF- and AFFF-related compounds at the aforementioned Bases.

349. At no point during their training or career did Plaintiffs receive any warning that Defendants' AFFF and/or PFOS chemicals were toxic or carcinogenic.

350. Plaintiffs suffered their respective injuries as a result of exposure to Defendants AFFF products.

351. Plaintiffs have suffered personal damages and continue to suffer as a proximate result of Defendants' actions and inactions herein alleged.

352. Plaintiffs resided at the Wurtsmith Air Force Base, and other Air Force Bases listed respectively above, at times material to their PFAS exposure.

**COUNT I: STRICT PRODUCT LIABILITY BASED ON DESIGN DEFECT
(BY PLAINTIFFS AGAINST ALL DEFENDANTS)**

353. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full herein.

354. Defendants were engaged in the business of researching, designing, manufacturing, testing, marketing, distributing, and/or selling Fluorochemical Products.

355. As commercial designers, manufacturers, distributors, suppliers, sellers, and/or marketers of Fluorochemical Products, Defendants had a strict duty not to place into the stream of commerce a product that is unreasonably dangerous.

356. At the time of manufacture, Defendants knew that the chosen formulation(s) of Fluorochemical Products was not biodegradable, would bioaccumulate in humans and wildlife, and was toxic to humans and the environment.

357. Defendants were also aware and/or in possession of an available safer design that was functional and reasonably priced.

358. Defendants were also aware that their Fluorochemical Products, when sold would contaminate Plaintiffs' drinking water supply and cause damages.

359. Defendants' Fluorochemical products were manufactured for placement into trade or commerce.

360. On information and belief, the Fluorochemical Products as manufactured and/or sold by Defendants reached Plaintiffs' drinking water supply without substantial change in its condition and was used by consumers, local manufacturers, local fire training facilities, local fire departments, and airports, among others, in a reasonably foreseeable and intended manner.

361. The Fluorochemical Products, as manufactured and/or sold by the Defendants, were "defective" and "unreasonably dangerous" when they left the Defendants' control, entered the stream of commerce, and were received by consumers, manufacturers, firefighting training academies, local fire departments, and airports, among others because it was dangerous to an extent beyond that which would be contemplated by the ordinary user.

362. The Fluorochemical Products Defendants manufactured and/or sold were defective in design because, even when used as intended and directed by Defendants, they can result in the contamination of soil and groundwater with PFOA and/or PFOS creating a significant threat to drinking water supplies.

363. The Fluorochemical Products Defendants manufactured did not meet a consumer's reasonable expectation as to their safety because of the propensity to contaminate soil and groundwater when used as intended.

364. Defendants failed to develop and make available alternative products that were designed in a safe or safer manner, even though such products were

technologically feasible, practical, commercially viable, and marketable at the time Defendants introduced Fluorochemical Products containing PFOA and/or PFOS into the stream of commerce and places where Plaintiffs consumed drinking water.

365. The specific risk of harm in the form of soil, groundwater, and drinking water contamination from Fluorochemical Products containing PFOA and/or PFOS that Defendants manufactured and/or sold was reasonably foreseeable or discoverable by Defendants.

366. The design, formulation, manufacture and/or distribution and sale of Fluorochemical Products containing PFOA and/or PFOS that were known to be toxic and extremely mobile and persistent in the environment was unreasonably dangerous.

367. Fluorochemical Products' failure to perform safely was a proximate cause of Plaintiffs' damages requiring damages in an amount to be determined at trial. Defendants are strictly, jointly, and severally liable for all such damages.

COUNT II: STRICT PRODUCT LIABILITY BASED ON FAILURE TO WARN (BY PLAINTIFFS AGAINST ALL DEFENDANTS)

368. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full herein.

369. The use of Fluorochemical products in the proximity of Plaintiffs' drinking water supply for consumer use, manufacturing, training of fire personnel, firefighting, and disposal in landfills was a reasonably foreseeable use. Defendants

knew or should have known that Fluorochemical Products used in this manner can contaminate soil, surface water, stormwater, and groundwater with PFOA and/or PFOS, creating a significant threat to human health and the environment.

370. It was foreseeable that PFOA and/or PFOS from the Fluorochemical Products that Defendants manufactured and sold would enter the environment, resulting in the contamination of drinking water supplies that rely upon surface water as a source, including Plaintiffs' drinking water supply.

371. Defendants knew or should have known of the risks posed by their Fluorochemical Products.

372. The ordinary consumer—whether residential, industrial, municipal, or otherwise—would not have known or appreciated the risk of contamination from ordinary use and disposal of Defendants' Fluorochemical Products without an appropriate warning.

373. Defendants had a duty to warn Plaintiffs, regulators, the public, and the users of Fluorochemical Products of these hazards.

374. Defendants, however, failed to provide adequate warnings of these hazards.

375. Defendants' failure to issue the proper warnings relating to Fluorochemical Products containing PFOA and/or PFOS affected the market's acceptance of these products containing PFOA and/or PFOS.

376. Defendants' failure to issue the proper warnings relating to Fluorochemical Products containing PFOA and/or PFOS prevented the users of the product from treating them differently with respect to their use and environmental cleanup.

377. Defendants' failure to issue the proper warnings related to Fluorochemical Products containing PFOA and/or PFOS prevented the users of the product from seeking alternative products, including but not limited to, using alternative products for purposes of training.

378. Defendants' action in placing Fluorochemical Products containing PFOA and/or PFOS into the stream of commerce without an appropriate warning as to use, possible toxic contamination, and disposal was a direct and proximate cause of Plaintiffs' injuries.

379. Defendants knew or should have known, in the exercise of ordinary care, that their PFAS products were unreasonably dangerous and failed to warn of their dangerous propensity.

380. As a direct and proximate result of the Defendants' failure to warn, Plaintiffs have suffered damages in an amount to be determined at trial. Defendants are strictly, jointly, and severally liable for all such damages.

**COUNT III: STRICT LIABILITY (ABNORMALLY DANGEROUS
ACTIVITY) (BY PLAINTIFFS AGAINST DEFENDANTS)**

381. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full herein.

382. At all relevant times, Defendants designed, manufactured, marketed, distributed, sold disposed of, discharged, and emitted hazardous substances from the facilities which they owned, controlled, and operated.

383. As a result of Defendants' discharging such substances from their sites, the groundwater under Plaintiffs' residences was contaminated with hazardous substances, creating actual harm to Plaintiffs.

384. The manufacture, utilization, disposal, and discharge of PFAS and other toxins constitute abnormally dangerous activities that introduce an unusual danger in the community.

385. Defendants' activities in selling, manufacturing, utilizing, disposing, and discharging of these products presented a high degree of risk of harm to humans and the environment.

386. It was likely that the harm resulting from Defendants' activities would be great. The exercise of reasonable care does not eliminate the risk of harm posed by Defendants' activities.

387. Defendants' activities are not a matter of common usage in the areas in which they were carried out.

388. Defendants' activities were inappropriate to the locations in which they were carried out.

389. The dangerous attributes of and risk posed by Defendants' activities outweighed their value to the community.

390. The manufacture, utilization, disposal, and discharge of these products are not matters of common usage in the areas where these activities were carried out.

391. At all relevant times, the risk of the Defendants' abnormally dangerous activities outweighed the value to the community.

392. Defendants' acts and omissions in designing, marketing, selling, manufacturing, utilizing, disposing, and discharging hazardous chemicals proximately caused the contamination of Plaintiffs' drinking water and injuries and damages to Plaintiffs, making them strictly liable for the harm caused by such contamination.

393. Defendants all foreseeably contributed to the contamination of the environment and Plaintiffs' drinking water with PFAS and other toxins, and all subsequently contributed to Plaintiffs' exposure to these chemicals, thereby causing injury and damages to Plaintiffs as set forth.

394. As a direct and proximate result of Defendants' discharges of hazardous substances and contaminants, Plaintiffs have and will continue to suffer damages.

**COUNT IV: STRICT LIABILITY—STATUTORY (BY PLAINTIFFS
AGAINST DEFENDANTS)**

395. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full herein.

396. Plaintiffs assert any and all remedies available under statutory causes of action the Plaintiffs' states for strict liability against each Defendant.

397. The Defendants were engaged in designing, manufacturing, marketing, selling, and distributing AFFF.

398. AFFF was in a defective condition and unreasonably dangerous to users and/or consumers when designed, manufactured, marketed, sold, and/or distributed to the public by the Defendants.

399. As a direct and proximate result of the Defendants products' aforementioned defects, the Plaintiffs have been injured, sustained severe and permanent pain, suffering, disability, impairment, loss of enjoyment of life, loss of care, comfort, economic loss, and damages including, but not limited to medical expenses and other damages.

400. The Defendants are strictly liable in tort to the Plaintiffs for their wrongful conduct.

COUNT V: NEGLIGENCE (BY PLAINTIFFS AGAINST DEFENDANTS)

401. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full herein.

402. Defendants had a duty to Plaintiffs to manufacture and/or market, distribute, and sell their Fluorochemical Products in a manner that avoided contamination of the environment and drinking water supplies and avoided harm to those who foreseeably would be injured by the PFOA and/or PFOS contained in Defendants' Fluorochemical Products.

403. The use, including the disposal, of Defendants' Fluorochemical Products by consumers, manufacturers, local fire training academies, fire departments, airports and others was a reasonably foreseeable use. Defendants knew or should have known that their Fluorochemical Products used and disposed of in this manner would contaminate soil, groundwater, and surface water with PFOA and/or PFOS, creating a significant threat to human health and the environment. Defendants had a duty to prevent the release into the environment of PFOA and/or PFOS, in the foreseeable uses of their Fluorochemical Products to avoid harming those who would consume drinking water in the immediate vicinity, including Plaintiffs drinking water.

404. Upon learning of the science-based harm and/or potential harm from PFAS exposure, including results of Defendants' internally conducted tests and government findings, Defendants owed Plaintiffs a duty to act reasonably and to give Plaintiffs adequate warnings. Defendants breached their duties when they negligently continued to manufacture, market, distribute, sell, or use PFAS

chemicals in such a manner as to result in the contamination of Plaintiffs' water supply, and without giving Plaintiffs adequate warning about the dangers of PFAS to humans and the environment.

405. Defendants further breached that duty by continuing to release contaminants into Plaintiffs' local water supply by continuing their manufacture, marketing, sale, and/or use of PFAS chemicals within the proximity of Plaintiffs' drinking water supply and by failing to remediate their contamination.

406. As a direct and proximate result of Defendants' breach of their duties, Defendants, individually and collectively, caused Plaintiffs to suffer damages, including damages associated with Plaintiffs' medical conditions, pain and suffering, fear of developing future medical illnesses, and such other damages in an amount to be determined at trial. Defendants are strictly, jointly, and severally liable for all such damages.

COUNT VI: NEGLIGENCE PER SE (BY PLAINTIFFS AGAINST DEFENDANTS)

407. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full herein.

408. Plaintiffs bring this cause of action pursuant to all relevant common law and state statutory provisions, including but not limited to 15 U.S.C. §§ 2607 and 2614, 33 U.S.C. §§ 1311(a) and 1342, and 42 U.S.C. §§ 300i-1 and 6921-6939e to

the extent that they impose duties of care on Defendants respecting Defendants' actions and/or omissions towards Plaintiffs and/or Plaintiffs' safety.

409. As a result of Defendants' acts and/or omissions resulting in harm to Plaintiffs, Defendants violated and/or continue to violate and/or breach one or more federal statutes and/or duties, including but not limited to 15 U.S.C. §§ 2607 and 2614, 33 U.S.C. §§ 1311(a) and 1342, and 42 U.S.C. §§ 300i-1 and 6921-6939e, constituting negligence per se, including liability for all injuries to Plaintiffs associated with the fluorochemical products.

410. Defendants' violation of law and breach of its statutory duties directly and proximately caused and continue to cause damage directly and proximately to Plaintiffs in the form of bodily and emotional injury.

COUNT VII: BATTERY (BY PLAINTIFFS AGAINST ALL DEFENDANTS)

411. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full herein.

412. At all relevant times, Defendants possessed knowledge that the AFFF containing PFAS which they designed, engineered, manufactured, fabricated, sold, handled, released, trained users on, produced instructional materials for, used, and/or distributed were bio-persistent, bio-accumulative, toxic, potentially carcinogenic, and/or harmful/injurious and that their continued manufacture, use, sale, handling,

release, and distribution would result in Plaintiffs having PFAS in their blood, and the biopersistence and bioaccumulation of such PFAS in Plaintiffs' Blood.

413. However, despite possessing such knowledge, Defendants knowingly, purposefully, and/or intentionally continued to engage in such acts and/or omissions, including but not limited to all such acts and/or omissions described in this Complaint, that continued to result in Plaintiffs accumulating PFAS in their blood and/or bodies, and such PFAS persisting and accumulating in Plaintiffs' blood and/or bodies such that it eventually manifested into an injury.

414. Defendants did not seek or obtain permission or consent from Plaintiffs to put or allow PFAS materials into their blood and/or bodies, or to persist in and/or accumulate in Plaintiffs' blood and/or body.

415. Entry into, persistence in, and accumulation of such PFAS in Plaintiffs' blood and/or bodies without permission or consent is an unlawful and harmful and/or offensive physical invasion and/or contact with Plaintiffs' persons and unreasonably interferes with Plaintiffs' rightful use and possession of their blood and/or bodies.

416. At all relevant times, the PFAS present in the blood of Plaintiffs originated from Defendants' acts and/or omissions.

417. Defendants continue to knowingly, intentionally, and/or purposefully engage in acts and/or omissions that result in the unlawful and unconsented-to

physical invasion and/or contact with Plaintiffs that resulted in persisting and accumulating levels of PFAS in Plaintiffs' blood.

418. Plaintiffs, and any reasonable person, would find the contact at issue harmful and/or offensive.

419. Defendants acted intentionally with the knowledge and/or belief that the contact, presence and/or invasion of PFAS with, onto and/or into Plaintiffs' blood, including its persistence and accumulation in the blood, was substantially certain to result from those very acts and/or omissions.

420. Defendants' intentional acts and/or omissions resulted directly and/or indirectly in harmful contact with Plaintiffs' blood and/or bodies.

421. The continued presence, persistence, and accumulation of PFAS in the blood and/or body of Plaintiffs is offensive, unreasonable, and/or harmful, and thereby constitutes a battery.

422. The presence of PFAS in the blood and/or body of Plaintiffs altered the structure and/or function of such blood and/or body parts and resulted in injury.

423. As a direct and proximate result of Defendants' negligence, Plaintiffs have been injured, sustained severe and permanent pain, suffering, disability, impairment, loss of enjoyment of life, loss of care, comfort, economic loss, and damages including, but not limited to medical expenses and other damages.

**COUNT VIII: CONCEALMENT, MISREPRESENTATION, AND FRAUD
(BY PLAINTIFFS AGAINST DEFENDANTS)**

424. Plaintiffs hereby incorporate by reference the allegations contained in the preceding paragraphs of this Complaint as if restated in full herein.

425. The Defendants have a general duty to inform Plaintiffs about the actual and potential harm to Plaintiffs from direct and proximate exposure to Defendants' chemical products.

426. The Defendants negligently, knowingly, willfully, and maliciously concealed and falsely misrepresented information concerning the harmful nature of the fluorochemicals from Plaintiffs with the intent to deceive Plaintiffs. Plaintiffs thereby suffered and continue to suffer harm and damage.

427. Defendants knew that information concerning the safety risks associated with fluorochemicals and their presence in Defendants' products were material facts to Plaintiffs.

428. Defendants committed fraud against Plaintiffs by affirmatively representing that Defendants' fluorochemical products were harmless and did not present any risk of harm, when Defendants knew, reasonably should have known, or had cause to know, that their products had caused, and were continuing to cause, bodily injury and/or risk of such bodily injury to Plaintiffs.

429. Plaintiffs relied on Defendants' affirmative representations and/or omissions in believing that Defendants' fluorochemical products were safe.

Plaintiffs thereby continued to use and/or be exposed to the fluorochemical products, and in not seeking treatment and/or ways to remedy their past exposure to Defendants' fluorochemical products. If Plaintiffs knew otherwise, Plaintiffs would have acted reasonably and differently to reduce or prevent their exposure, including finding alternative sources of drinking water.

430. Defendants are liable to the Plaintiffs.

COUNT IX: TOLLING OF THE STATUTE OF LIMITATIONS

Discovery Rule Tolling

431. Plaintiffs did not know, nor could they have reasonably discovered by the exercise of reasonable diligence, that exposure to fluorochemical products, including AFFF, was harmful to human health. The risks of said chemicals and AFFF were not obvious to the users of AFFF, nor were they obvious to individuals such as Plaintiffs in the vicinity of AFFF use. Since Plaintiffs could not have reasonably discovered the defects and risks associated with the use of fluorochemical products, they could not protect themselves from exposure to Defendants' fluorochemical product. For this reason, all applicable statutes of limitations have been tolled by operation of the discovery rule with respect to Plaintiffs' claims.

432. Plaintiffs had no way of knowing about the risk of serious injury associated with the use of, and exposure to, AFFF and fluorochemical products until very recently. Further, Plaintiffs could not have discovered, through the exercise of

reasonable diligence, that exposure to AFFF is harmful to human health within the time period allowed by any applicable statute of limitations.

433. During the relevant times, Plaintiffs did not possess specialized scientific or medical knowledge. Plaintiffs did not, and could not, have discovered or known facts that could cause a reasonable person to suspect the risk associated with the use of Defendants' fluorochemical products. Further, a reasonable and diligent investigation by Plaintiffs earlier would not have disclosed that AFFF could cause personal injury.

434. Wherefore, all applicable statutes of limitations pertaining to Plaintiffs' claims have been tolled by operation of the discovery rule.

Fraudulent Concealment

435. Rather than disclose critical safety and health information regarding its AFFF and fluorochemical products, Defendants have consistently and falsely represented the safety of AFFF products.

436. This fraudulent concealment continues to the present day.

437. Wherefore, due to Defendants' knowing and active fraudulent concealment and denial of the facts alleged herein through the relevant time for this action, all applicable statutes of limitations have also been tolled.

Estoppel

438. Defendants were under a continuous duty to consumers, end users, and other persons, such as Plaintiffs, coming into contact with their fluorochemical products, to provide truthful and reliable safety information concerning their products and the risks associated with their use, as well as exposure to AFFF.

439. Rather than fulfill this duty, Defendants knowingly, affirmatively, and actively concealed important safety information and warnings concerning AFFF, and the health risks associated with the same.

440. Wherefore, Defendants are estopped from relying on any statute of limitations in defense of this action.

PRAYER FOR RELIEF WHEREFORE, Plaintiffs respectfully request judgment against Defendants as follows:

- A. Entry of judgment in Plaintiffs' favor and against Defendants, jointly and severally, as applicable, on each Count of this Complaint;
- B. Compensatory damages to Plaintiffs for past and future damages, including but not limited to pain and suffering for severe and permanent injuries sustained by Plaintiffs, medical costs, and medical monitoring.
- C. Damages associated with fear of developing future serious diseases or illnesses such as cancers;
- D. Interests and costs as provided by law;

- E. An award to Plaintiffs for the fees and costs of these proceedings (including but not limited to expert fees) and reasonable attorneys' fees, as provided by law;
- F. An award for punitive damages for the wanton, willful, fraudulent, and/or reckless acts of the Defendants in an amount sufficient to punish Defendants and deter future similar conduct; and
- G. An award for such other and further relief as the nature of this case may require or as this Court deems just, equitable, and proper.

DEMAND FOR JURY TRIAL Pursuant to Federal Rule of Civil Procedure 38, Plaintiffs demand a jury trial.

Dated: April 8, 2024

Respectfully Submitted,

/s/Raymond Foley III
Raymond I. Foley III (P74868)
Foley Law Offices, PLLC
15530 Middlebelt
Livonia, MI 48154
Phone: (734) 462-7500
Fax: (734) 464-3538
Email: raymond@foleylawoffices.net

/s/ Jason Larey (anticipated admission)
Jason Larey, Esq.
FLORIDA BAR NO.:1019237

THE DOWNS LAW GROUP, P.A.
3250 Mary Street, Suite 307
Coconut Grove, Florida 33133
Telephone (305) 444-8226
Facsimile: (305)-444-6773
Email: jlarey@downslawgroup.com

/s/ Jason P. Frank (anticipated admission)

Jason Frank, Esq.
FLORIDA BAR NO.: 1049042
THE DOWNS LAW GROUP, P.A.
3250 Mary Street, Suite 307
Coconut Grove, Florida 33133
Telephone (305) 444-8226
Facsimile: (305)-444-6773
Email: jfrank@downslawgroup.com

/s/ Samuel J Gittle (anticipated admission)

Samuel J Gittle, Esq.
Florida Bar No.: 099778
THE DOWNS LAW GROUP, P.A.
3250 Mary Street, Suite 307
Coconut Grove, Florida 33133
Telephone (305) 444-8226
Facsimile: (305)-444-6773
Email: Sgittle@downslawgroup.com

Attorneys for Plaintiff